

A Grammar of Dolgan

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A Grammar of Dolgan

*A Northern Siberian Turkic Language of the Taimyr
Peninsula*

By

Chris Lasse Däbritz



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Preface

Back then, in summer 2017, returning from four weeks of fieldwork in Dudinka and sailing upstream on the Yenisei river, I started to prepare a grammar sketch of Dolgan. Initially, this grammar sketch was intended for an introductory course to Dolgan to be taught in the winter term 2017/2018, which did not take place in the end. Since then, much time has passed, accompanied by phases of intensive grammar writing and phases of doing nothing at all. Within the last two years, dominated by the Covid-19 pandemic, there was much time that I otherwise might have spent on football pitches, in theatres or bars, or simply doing nonsense with friends. Instead, there were many lonesome but still inspiring hours of running, walking and cycling, followed by likewise lonesome hours of writing the gotten ideas down. Nonetheless, the grammar at hand would never have seen the light of the day if several people and organizations had not supported me the way they did.

First, the grammar would lack its empirical base without the INEL Dolgan Corpus, which was compiled within the long-term research project INEL (*Grammatical Descriptions, Corpora and Language Technology for Indigenous Northern Eurasian Languages*), conducted at the Institute for Finno-Ugric/Uralic Studies of the Universität Hamburg. Besides the organizational support, the INEL project provided a perfect research infrastructure for undertaking the task of grammar writing, including the possibility to conduct fieldwork. The latter leads me to express my deepest gratitude to the Dolgan native speaker community, who warmheartedly accepted me in 2017, and who patiently answered my probably odd questions. Especially noteworthy is the involvement of Nina S. Kudrjakova and Anna A. Barbolina, with whom I could discuss several essential issues afterwards remotely via e-mail, even in times of a pandemic.

Regarding the content of this volume, I am thankful to many persons who shared their knowledge, experiences and insights with me, which significantly put the project forward. Without Beáta Wagner-Nagy, the grammar would probably not exist in this shape since she proposed to include it in the series *Indigenous Languages of Russia*; besides that, she read the whole manuscript and commented on it. Valentin Gusev, as the second editor of the series, also provided valuable advice on several topics. The same holds for the three reviewers, who gave me helpful feedback and comments, which certainly improved the grammar at hand. In this context, I also wish to thank the publishing house Brill for accepting the manuscript, as well as for the smooth cooperation.

Apart from the many colleagues in and outside Hamburg, as well as commenters on various conferences, the following persons deserve special men-

tion. On several occasions and in profound but still hearty discussions, Éva Csató and Lars Johanson evaluated my ideas against the backdrop of traditional turcology, which often made me re-think things and patterns. Not being an expert in phonetics, I could always bother Alexandre Arkhipov with sometimes stupid questions on this topic, as well as on terminological issues in typology. Together with Elena Skribnik, I discussed the chapter on verbal morphology, especially concerning mood/modality and evidentiality, which opened new perspectives for me. Coming to semantics and the lexicon, Josefina Budzisch urged me to be precise when talking about definiteness; moreover, she applied the section on kinship terminology to her family to prevent errors in reasoning and contradictions. The students of an introductory course to Dolgan in winter 2020/2021 had to cope with the manuscript, and I am thankful to those who not only participated in the class but also commented on the manuscript. Finally, there is Eugénie Stapert, with whom I had the pleasure to visit the Dolgans, and whom I can always ask anything about Dolgan and the Dolgans.

Outside the scientific community, there are myriads of people I owe thanks for nearly everything. Especially, my closest friends never complain when I talk about weird things such as existential predications, though constantly showing me that there is a beautiful world outside linguistics. The same holds for my parents, who always encourage(d) me to go my own way, which is admittedly not always the easiest, nor the most understandable and straightforward. Finally, there is Florian, who is always there when I need him—be it on walks in the endless landscape around Agger, in identity crises or simply when coming home. And, as if this was not enough, I owe thanks to him for patiently discussing linguistic issues, reading my manuscripts and even collecting Dolgan reindeer terminology.

Pasi:baŋ!

Lüneburg, 22 March 2022

Abbreviations

Gloss	Explication
1	first person
2	second person
3	third person
ABE	abessive
ABL	ablative case
ACC	accusative case
ACCEL	accelerative
ACTN	action noun
ADD	additive
ADJZ	adjectivizer
ADM	admonitive mood
ADVZ	adverbializer
AFF	affirmative
AGN	agent noun
AOR	aurist
APRX	approximative numeral
ASST	assistive
AUX	auxiliary verb
CAPT	captative
CAUS	causative
COLL	collective numeral
COMP	comparative case/degree
COND	conditional mood
COOP	cooperative
CVB	converb
CVB.ANT	anterior converb
CVB.MOD	modal converb
CVB.PURP	purposive converb
CVB.SEQ	sequential converb
CVB.SIM	simultaneous converb
DAT/LOC	dative-locative case
DIM	diminutive
DISTR	distributive numeral
DU	dual
EMOT	emotional ~ emotive
EMPH	emphasis

EP	epenthetic vowel
EVID	evidential
EX	existential
EXCL	exclamative
FUT	future tense
GEN	genitive case
HAB	habitual
IMP	imperative mood
INDF	indefinite
INFR	inferential
INS	instrumental case
INTL	intentional
INTS	intensifier
ITER	iterative
LIM	limitative numeral
LOC	locative case
MID	middle voice
MLTP	multiplicative
MOD	modal particle
MOM	momentaneous
MULT	multiple subject/object
NEC	necessitative mood
NEG	negative
NEG.EX	negative existential
NMLZ	nominalizer
NOM	nominative case
OBL	oblique
ORD	ordinal numeral
PART	partitive case
PASS	passive
PH	placeholder
PHIL	philative
PL	plural
POSS	possessive suffix
POT	potential mood
PRO	pronoun
PROB	probabilitive mood
PROPR	propriative
PRS	present tense
PST	past tense

PTCL	particle
PTCP	participle
Q	interrogative particle/clitic
R	1) Russian code-switch in Dolgan speech, 2) Russian item in Dolgan speech carrying Russian morphology
RECP	reciprocal
REFL	reflexive
SEM	semelfactive
SG	singular
SIM	similative
SOC	sociative
TEMP	temporal mood
VBZ	verbalizer

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Introduction

1.1 How to Read This Book

This book is a descriptive grammar of the Turkic language of Dolgan, spoken on the Taimyr Peninsula¹ and in adjacent areas in the very north of the Russian Federation. In the following sections and chapters, it will become clear that Dolgan exhibits many extra-linguistic and linguistic peculiarities, which make the language incredibly fascinating and worth a detailed discussion. As a first teaser, it can already be stated here that Dolgan is linguistically relatively close to its nearest relative Sakha (Yakut),² which has led researchers for a long time to account for it as a variety of the latter, cf. Dolgich's (1963: 129) statement in his well-known paper on the origin of the Dolgans: "[...] *долганский язык является диалектом якутского языка*." '[...] the Dolgan language is a dialect of the Yakut language.'. Only in 1985 did Elizaveta I. Ubrjatova account for Dolgan as a separate language, namely in her monograph on the language of the Norilsk Dolgans.

Given this, I want to emphasize that the grammar at hand describes the Dolgan language from an internal perspective, eventually taking Sakha data into account but hopefully not being biased by them. Moreover, it differs from earlier monographs on the language (Ubrjatova 1985, Li 2011, Artem'ev 2013a–b, Artem'ev et al. 2013) in its potential target group, in its approach and in the data which form the base of the grammar. Whereas Ubrjatova (1985) and Li (2011) can count as descriptive grammars, they rely on data only from parts of the Dolgan community. As the title of Ubrjatova's (1985) monograph already shows, it explicitly describes the language of the Dolgans formerly living around Norilsk

-
- 1 Russian proper names and terms are presented as follows: 1) If there is a commonly used English counterpart, e.g. Moscow, this term is used. 2) If a proper name or a term, which lacks such a counterpart, is named in the main text, the BGN/PCGN romanization principles (<https://www.gov.uk/government/publications/romanization-systems>, last access: 01.03.2022) are applied, as, e.g. in the case of the settlement Zhdanikha (cf. Cyrillic Жданиха). 3) If Russian data is presented in linguistic examples, e.g. in the case of code-switching or in the case of loan origins, common Slavistic conventions are applied, which mostly follow ISO/R 9:1968. References and the bibliography also use ISO/R 9:1968.
 - 2 Within this grammar, the self-denomination Sakha is used for both language and people, which used to be referred to as Yakut. Only in historical and comparative contexts, the term Yakut is sporadically used for clarification.

(Ubrjatova 1985: 3). Li's (2011) monograph rests purely upon elicitation data elicited from three informants during five days (Li 2011: 7–15). Finally, Artem'ev's (2013) three-volume description of Dolgan is written for educational rather than scholarly purposes.

All this does not diminish the importance of those monographs. Nevertheless, it has to be pointed out that the grammar at hand differs significantly. First and foremost, it is a corpus-based grammar, referring to the INEL Dolgan Corpus (Däbritz et al. 2019; see Section 1.6.1); only sporadically additional language data is used. Second, this grammar aims to cover the language of the whole Dolgan area (see Section 1.5.4) except the varieties spoken in the Anabar Ulus of the Republic of Sakha (Yakutia), whose status is until now quite unclear. Finally and most importantly, the grammar takes a functional-typological perspective, whereby the grammar aims at providing an overview of the grammatical structure of Dolgan, not being obliged to any linguistic theory. Instead, it is obliged to present the data as accessible as possible for a range of users as broad as possible. Therefore, compromises are made in many places. So, syntacticians will probably miss a derivational account to clausal syntax, whereas turcologists will probably miss more comprehensive historical-comparative hints. However, all potential users may hopefully find the information they look for, and they are warmly encouraged to contribute to the research on Dolgan from their particular theoretical and methodological backgrounds. Thus, the grammar at hand shall not be *the* grammar of Dolgan, but a starting point for further research from a wide range of perspectives, following different approaches.

Indeed, one can read this book from the very beginning to the very end. Since most users will probably not, but rather search pointedly for specific pieces of information, the composition of the grammar is shortly wrapped up in what follows.

The remaining sections of this introductory chapter provide general information on the Dolgans and the Dolgan language (Sections 1.2 to 1.5), as well as the material and data forming the base of this grammar (Section 1.6). Chapter 2 deals with all aspects of phonology, phonetics and morphonology and also gives some rudimentary information on prosody. In Chapter 3, the relevant word classes and their distinctive features are discussed. Chapter 4 deals with the inflectional properties of nominal items (nouns, adjectives, numerals), and Chapter 5 deals with the inflectional properties of pronouns. Both categories are kept apart since they differ to a noticeable extent in their inflection. In Chapter 6, the large complex of verbal inflectional morphology is touched upon: Thereby, non-finite forms are discussed first since they form the base for many finite tense, aspect, mood and evidential forms. The chapters dealing with phonology, word classes and inflectional properties are more formally

oriented than the following chapters because they somewhat mechanically present the phonological and morphological “inventory” of the language.

Chapter 7 deals with non-clausal syntax, describing the syntax of noun phrases, adjective phrases, verb phrases, adpositional phrases, and adverb phrases. Chapter 8 is devoted to the syntax of simple clauses, and Chapter 9 is dedicated to the syntax of complex clauses. These three chapters take a more functional perspective on the data than those dealing with morphology, starting from a given function or concept and explaining how Dolgan expresses it formally. Chapter 10 deals with various aspects of discourse organization: information structure, reference tracking, the usage of placeholder items, and the coding of direct and indirect speech.

Some lexicological issues are touched upon in Chapter 11 and Chapter 12, whereby the former deals with the lexicon itself, and the latter is devoted to word formation and derivational processes. These chapters, however, rather open perspectives and point to potentially interesting phenomena but cannot provide a complete lexicological description of the Dolgan language.

Chapter 13 includes five short glossed sample texts of Dolgan speech, illustrating various varieties and functional domains of the language. Finally, there is a complete list of references, accompanied by an index pointing to key terms.

1.2 The Speakers of Dolgan

The speakers of Dolgan settle mainly on the Taimyr Peninsula and in adjacent areas in the extreme north of the Russian Federation. As can be seen on Map 1, the indicated territory of the Dolgan population seems to be huge, reaching from the lower course of the river Yenisei to the Laptev Sea. However, it has to be emphasized that there is no spatial continuity of the Dolgan population within the indicated area, but it is concentrated in settlements (see below).

According to the last Russian census, there are 7,885 Dolgans in the Russian Federation, whereby 1,054 persons declared to speak Dolgan (VPN 2010). Roughly three-quarters of these people live in the administrative unit *Taimyr Dolgan-Nenets District* (Russian: *Tajmyrskij Dolgano-Neneckij Rajon*),³ which

3 The given administrative unit was founded in 1930 under the name *Taimyr Dolgan-Nenets Autonomous Okrug* (Russian: *Tajmyrskij Dolgano-Neneckij Avtonomnyj Okrug*). In 2007, it was integrated into the Krasnoyarsk region and renamed as stated in the main text.



MAP 1 Dolgan territory within Northern Eurasia

Note: This and the other maps in this section were created on the base of *OpenStreetMap* (<https://www.openstreetmap.org>, last access: 01.03.2022), which is licensed on terms of the Open Database License “ODbL 1.0”.

forms part of the Krasnoyarsk region. The remaining quarter of the Dolgan people lives in the administrative unit *Anabarskij Ulus* of the Republic of Sakha and in several big cities in the whole of Russia. Within the *Taimyr Dolgan-Nenets District*, Dolgans live in the administrative centre of the region, Dudinka, the small-sized town Khatanga and a dozen of settlements along the rivers Kheta and Khatanga. Map 2 shows the settlements having Dolgan population (red dots), as well as the town of Norilsk and the settlement of Dikson (grey dots).

In many settlements, Dolgans form the majority of the inhabitants; Chart 1 shows the ethnic composition of all settlements of the Taimyr Dolgan-Nenets District (except for Dikson, which lacks an indigenous population). Furthermore, it becomes immediately apparent that the more remote a village is, the higher the number and percentage of Dolgans are in the settlement. Hence, settlements around and east of Khatanga—e.g. Kresty, Novorybnoe and Popigay—can be described as ethnically almost purely Dolgan.

Coming to endonymic denomination, the Dolgans call themselves *dalgan* ~ *dulgan* ~ *dalgat̚tar* ~ *dulgat̚tar*, *haka* ~ *hakalar*, *tîa* ~ *tîalar* ~ *tîa kihite* ~ *tîa kihilere* and allegedly also *tege*. The ethnonym *dalgan* ~ *dulgan* and its plural variant *dalgat̚tar* ~ *dulgat̚tar* go back to the name of an Ewenki clan, which



MAP 2 Settlements with Dolgan population

CHART 1 Ethnic composition of settlements in the Taimyr Dolgan-Nenets District^a

	Dolgans	Nganasans	Ewenki	Nenets	Enets	Russians and others	Total
Dudinka	786 4%	111 0.6%	71 0.4%	390 2%	24 0.1%	18,428 93%	19,810
Levinskii Peski	97 57.1%	7 4.1%	— —	7 4.1%	— —	59 34.7%	170
Karaul	63 1.4%	8 0.2%	22 0.5%	3,279 71.8%	17 0.4%	1,177 25.8%	4,566
Potapovo	26 6.5%	10 2.5%	40 10%	149 37.1%	11 2.7%	166 41.3%	402
Khantayskoe Ozero	184 50.5%	— —	148 40.7%	— —	2 0.5%	30 8.2%	364
Ust'-Avam	327 52.1%	260 41.4%	1 0.2%	1 0.2%	— —	39 6.2%	628

a Source: <https://www.taimyr24.ru/MO/Dudinka/>, last access: 01.03.2022. For some settlements the relative amounts of the given nationalities do not exactly sum up to 100% in the chart, which is due to rounding differences.

CHART 1 Ethnic composition of settlements in the Taimyr Dolgan-Nenets District (*cont.*)

	Dolgans	Nganasans	Ewenki	Nenets	Enets	Russians and others	Total
Volochanka	295 48.8%	266 44%	—	3 0.5%	—	40 6.6%	604
Katryrk	311 98.1%	1 0.3%	—	2 0.6%	—	3 0.9%	317
Kheta	340 96%	4 1.1%	—	2 0.6%	—	8 2.3%	354
Novaya	234 79.6%	52 17.7%	1 0.3%	—	—	7 2.4%	294
Kresty	303 98.4%	3 1%	—	—	—	2 0.6%	308
Khatanga	1,037 41.1%	13 0.5%	—	6 0.2%	—	1,468 58.2%	2,524
Kayak	2 50%	—	—	—	—	2 50%	4
Zhdanikha	193 94.6%	3 1.5%	—	5 2.5%	—	3 1.5%	204
Novorybnoe	508 96.6%	5 1%	1 0.2%	—	—	12 2.3%	526
Syndassko	557 97.7%	6 1.1%	4 0.7%	—	—	3 0.5%	570
Popigay	314 98.4%	—	1 0.3%	1 0.3%	—	3 0.9%	319
total (without Dikson)	5,577 17.4%	749 2.3%	289 0.9%	3,845 12%	54 0.2%	21,450 67.1%	31,964

took part in the ethnogenesis of the Dolgans (see in more detail in Section 1.3). The word can be decomposed into the Ewenki stem *dul-* meaning ‘middle’ and the suffix *-gan* forming demonyms (Vasilevič 1958: 578, 749; Dolgich 1963: 106). It probably referred initially to the people living at the middle reaches of a river (in contrast to those downriver and upriver), which immediately becomes plausible when regarding the fact that the Ewenki clan in question lived at the middle reaches of the river Lena. Additionally, it can be mentioned that at the northern shore of the Sea of Okhotsk, there exists a clan among the Ewens—the closest relatives of the Ewenks—which calls itself *dolgan*, too (Forsyth 1992:

82). The ethnonym *haka* and the plural variant *hakalar* is the Dolgan cognate of the Sakha word *saxa* meaning ‘Sakha (Yakut)’. The ethnonym *tîâ* ~ *tîâlar* and *tîâ kihite* ~ *tîâ kihilere* means ‘people of the (forest) tundra’, whereby *tîâ* means ‘tundra; forest; forest tundra’ and *kihi* means ‘human’, *-lar* ~ *-ler* being the plural marker and *-(t)e* being the third-person singular possessive suffix. Finally, the ethnonym *tege* is again of Tungusic origin (see also below for its exonymic usage) and means ‘tribe; clan; people’ (Boldyrev 2000b: 155; Myreeva 2004: 644).

The usage of these self-denominations varies to a great extent. Both in my data and during my fieldwork, I could not find a single instance of a self-denomination by a Dolgan as *tege*; Stapert (2013: 25) makes the same observation. During my fieldwork, people tended to name themselves *haka* or *dalga:n*, whereas I never heard the self-denomination *tîâ* or *tîâ kihi(te)*. Within the corpus data used (see Section 1.6.1 for a description), there are 116 instances of *haka*, 37 instances of *tîâ* or *tîâ kihi(te)* and 24 instances of *dalga:n* or *dulga:n*. Interestingly, the distribution of the ethnonyms is not arbitrary: Whereas speakers from the whole Dolgan area use *haka*, the occurrence of *dalga:n* ~ *dulga:n* and *tîâ* ~ *tîâ kihi(te)* is much more restricted. The ethnonym *dalga:n* ~ *dulga:n* is used almost only by one single speaker (18 out of 24 instances) in one single text, which is about the scientific works of Andrej A. Popov. The ethnonym *tîâ* ~ *tîâ kihi(te)* is used almost only by speakers coming from the “Upper” settlements (see Section 1.5.4) Ust’-Avam and Volochanka.⁴ Hence, the distribution of the usage of the ethnonyms seems to be both a sociolectal and a dialectal one: *haka* is used by speakers from the whole Dolgan territory in all domains, *dalga:n* ~ *dulga:n* is preferred in official contexts, i.e. Russian-dominated environments, and *tîâ* ~ *tîâ kihi(te)* is used only by people coming from the western part of the Dolgan territory. According to Dolgich (1963: 105), the ethnonym *tege* shall have been used mainly by the Norilsk Dolgans. This circumstance easily explains why it is not present in nowadays’ recordings anymore since the living grounds of the Norilsk Dolgans were destroyed during the first half of the 20th century (see in detail in Section 1.3). Within the Russian administration, the Dolgans are referred to as *dolgan* (plural: *dolgany*) ~ *dolganin* (plural: *dolgane*)⁵ nowadays. Still, from the 1930s up to the 1950s, *saxa* ~ *haka* was used for this purpose (Dolgich 1963: 105–106).

4 Interestingly, also one speaker who was born in Yessey and lives now in Tura, i.e. outside the Taimyr Dolgan-Nenets District, used this ethnonym.

5 From a slavistic point of view, the varying inflection of the ethnonym is worth mentioning: *Dolgan* is inflected like most of masculine nouns in Russian, whereas *Dolganin* and its

As for exonymic denominations, the term *dolgan* is most commonly used in all official, i.e. Russian-dominated spheres. Traditionally, however, the exonymic denominations vary greatly and give valuable hints to the origin and ethno-genesis of the Dolgan people. The Samoyedic-speaking Nganasans and Enetses (both Forest and Tundra Enets) call Dolgans *as'a* and *oša*, respectively. Interestingly, these demonyms are used not for Dolgans alone, but also for other people: In Nganasan, though less frequently, *as'a* also denotes Ewenks and the Vadeyev group of Nganasans (Wagner-Nagy 2019: 487), and Enets *oša* is used for all indigenous people of non-Samoyedic origin (i.e. primarily Dolgans and Ewenks, to a lesser extent Sakha and even Ewens) (Sorokina & Bolina 2009: 323). The third Samoyedic people on the Taimyr Peninsula, the Tundra Nenetses, used to call both Dolgans and Ewenks *tungo?* ~ *tungu?* (singular) and *tungos?* ~ *tungus?* (plural) (Lehtisalo 1956: 498; Amelina 2019: 33). This term is, according to Helimski & Janhunen (1990: 69–71), a Selkup loanword in Nenets, the loan origin being *ti-n qum* 'Tatar-GEN human', to which the collective suffix -s is added. According to Stern (2012: 116–117), the Tundra Nenetses living at the shore of the Yenisei distinguished Ewenks and Dolgans in the 19th century, calling the former *oss'ja*, which in turn is cognate with Nganasan *as'a* and Enets *oša*, and the latter *tingus'*, reminding of the Forest Nenets term *tiŋku:s* 'Tungus; Ewenk' (Helimski & Janhunen 1990: 67). Furthermore, Stern (2012: 116–117) proposes that the term *as'a* ~ *oša* ~ *oss'ja* was used primarily for Ewenks, whereas the term *tungo?* ~ *tungu?* ~ *tingus'* was used for the Dolgan newcomers. Given that Tundra Nenets *tungo?* ~ *tungu?* initially denoted North-Western Ewenks (Helimski & Janhunen 1990: 67), it seems, however, more plausible to assume that the Yenisei Nenetses, being in rather close contact with Forest Enetses, copied the term *oss'ja* later in order to keep Ewenks apart from Dolgans. In either case, the Dolgans were viewed as part of or at least closely related to the Ewenks so that the exact patterns of exonymic denominations of Dolgans by Samoyedic people are not entirely clear. Nonetheless, it is remarkable that the Samoyedic demonyms for Dolgans and Ewenks overlap to a high degree.

Those Ewenks, who are in close contact with Dolgans—i.e. the Ewenks from Khantayskoe Ozero and the Ilimpi region—traditionally call the Dolgans *tagə:*, literally meaning 'tribe; clan; people' (Myreeva 2004: 644; Bolina-Ukačë 2011: 64). This denomination has, thus, a demarcating function, which is additionally supported by the fact that the same term is used by Ayan and Uchur Ewenks living in the Far East of Russia (Myreeva 2004: 644) for denominating Ewen

plural form *Dolgane*—apparently motivated by *-an-* within the stem—is inflected similarly to *slav'janin* 'Slavic person' or *krest'janin* 'peasant'.

people. Apparently, the alleged Dolgan endonym *tege* used by Norilsk Dolgans (see above) arose out of this term as well. The Sakha people, in contrast, used to call the Dolgans *arga(lar)* ‘Western one(s)’ (Dolgich 1963: 105), whereas today, the quasi-official term *dolgan* is more frequent. The former term may carry two contrary connotations. On the one hand, it can be interpreted as denominating the Dolgans as Western people belonging to the Sakha people. On the other hand, it can be interpreted as denominating the Dolgans as people beyond the Western “border” of the Sakha people. In either case, *arga(lar)* is a demonym based on the geography of settlement of both people. Finally, Stachowski (1996: 125) accounts for Yessey Sakha *lama kihilere* as exonymic denomination of the Dolgans, literally meaning ‘Lamut [i.e. Ewen] people’.

1.3 Historical and Ethnographical Background

The history of the Dolgan people and its language is manifold and complex, which is why it deserves a detailed description here. Going several millennia back in time, Johanson (2021: 114–118) points out explicitly that the prehistory of Turkic people and languages is far from settled. There is common sense that the birthplace of both Turkic people and languages was located in a region, which let them acquire an equestrian pastoral nomadic way of life. Usually, this region is accounted for as the Central Asian steppes and the forest-steppe zone of Southern Siberia (Johanson 2021: 115). The disintegration of the Turkic people and the language family began in the last centuries BCE when the Oghur branch—the linguistic predecessors of Chuvash—split off (Johanson 2021: 153). Moving on in time-lapse and omitting many details, the speakers of the predecessor language of Dolgan and Sakha had their homeland in the Altay-Sayan region in Southern Siberia, probably forming part of the *Kurikan* tribes mentioned in Orkhon inscriptions (Johanson 2021: Ch. 6, Ch. 8). This can be shown, for example, by the old Sakha endoethnonym *Uraŋxaj*, which is related to this region in various historical sources (Kałużyński 1961: 120; Johanson 2021: 121). The ancestors of Sakha and Dolgan people left their homeland probably not earlier than the 13th century since Genghis Khan (ca. 1158–1227) and his bellicose campaigns are present in Sakha folklore and epics (Kałużyński 1961: 120; Johanson 2021: 130). Moving north-eastwards within the following four centuries, they reached their new homeland in the Lena basin. There, they were met for the first time by Russians in the first half of the 17th century (Kałużyński 1961: 121). Their migration northwards was at least partly motivated by the campaigns of bellicose Mongolic tribes in Central Asia. Nevertheless, the contacts of Pre-Sakha-Dolgan and Mongolic varieties must have been quite close since

both Dolgan and Sakha exhibit a noticeable stratum of Mongolic loanwords (Kałużyński 1961: 129–122; Ubrjatova 1985: 48–51; Pakendorf 2007: 8; see Section 11.2.1.1).

Given these common developments, the Dolgan people and language in today's shape is relatively young, having developed as recently as during the last four centuries. The process of this creation took place along the Kheta and Khatanga river systems, i.e. along the southern border of the Taimyr Peninsula, which is at the same time the border between Arctic tundra in the north and forest tundra in the south. This imaginary line, which reaches from Dudinka at the river Yenisei to the mouth of the river Khatanga and further to the mouth of the river Anabar into the Laptev Sea, is known as *Khatanga Trading Way* (see below). There is no general agreement about the details of the formation of the Dolgan people. Most of the researchers, however, agree that the Dolgan people arose out of the amalgamation of Turkic (Sakha/Yakut), Tungusic (Ewenki), Slavic (Russian "Tundra Peasants") and to a lesser extent Samoyedic (Nenets/Enets) people (Dolgich 1963: 128; Ubrjatova 1985: 5–6; Li 2011: 3–4).⁶ In his very detailed work on the origin of the Dolgans, Dolgich (1963: 93) states that the Dolgan people has been formed out of the following nine groups: 1–4. Ewenki clans named *Dolgan*, *Dongot*, *Edyan*, *Karanto*, 5. Tundra Yakuts/Sakha, 6. Russian *Tundra Peasants* (Russian *zatundrennye krest'jane*), 7. Yessey Yakuts/Sakha, 8. Ewenks from Letnie and the Ilimpi region, 9. Enets. Most of these groups did not live on the Taimyr Peninsula since olden times. Hence, some words on their geographical origin are in order here.

Up to the Russian colonization of Siberia in the 16th and 17th centuries, historiographic sources are very scarce, if not missing at all. Since one of the main aims of the Russian colonizers was to exact tribute in the form of fur (mostly sable and marten, but also fox and squirrel), it is so-called *yasak lists*⁷ that allow quite a detailed tracing of the indigenous population in Siberia from the 17th century. The Russians conquered the basins of the rivers Ob and Yenisei at the latest in the first half of the 17th century; in 1630, they reached the shores of the river Lena around the mouth of its left tributary river, the Vilyuy (Forsyth 1992: 35–38, 59). The Ewenki clan *Dolgan*, undoubtedly eponymous for the modern Dolgan people, is first mentioned in *yasak lists* from 1631–1632. At that time,

6 Recent genetic analyses point into the same direction indicating that the highest degree of resemblance is to be found between Dolgans, Taimyr Ewenks and Sakha-speaking Ewenks from the Olenyok region. See Stapert (2013: Ch. 2.6) and Whitten (2016: Ch. 5) for more detailed accounts.

7 The term *yasak* is of Turkic origin and was used in imperial Russia designating tribute to be paid by indigenous people of Siberia (see Forsyth (1992: 41–42) for a detailed account).



MAP 3 Northern Siberia in the 16th/17th century

the clan settled at the middle reaches of the river Lena, between the mouths of the rivers Aldan and Vilyuy (Dolgich 1963: 107). As was stated in Section 1.2, this also explains the etymology of the ethnonym *Dolgan*, which means ‘people living at the middle reaches of the river’. Hence, this designation refers to the river Lena and not to any river on the Taimyr Peninsula. In the second half of the 17th century, both Ewenki and Sakha people, among them the *Dolgans*, were fleeing from yasak payments and the Russian oppression north-westwards to the basins of the rivers Olenyok, Anabar and Kotuy (Forsyth 1992: 63; Stern 2012: 143–144). In 1678, the *Dolgans* appeared for the first time in a yasak book in Olenyok in the north-west of today’s Republic of Sakha, in 1761 the first time in a yasak book in the Mangazeya region (Dolgich 1963: 108–109). It is reported that Ewenki and Sakha clans had a common headman already in their territory at the river Lena (Ubrjatova 1985: 8), and that their material culture significantly mixed when moving north-westwards (Forsyth 1992: 176). Therefore, it seems plausible to assume that they were at least partly bilingual (Tungusic/Ewenki-Turkic/Sakha) at this time. Having reached the Taimyr Peninsula, the clan *Dolgan* had its centre at the trading station *Uboynoe*, located east of today’s Khatanga (Dolgich 1963: 110).

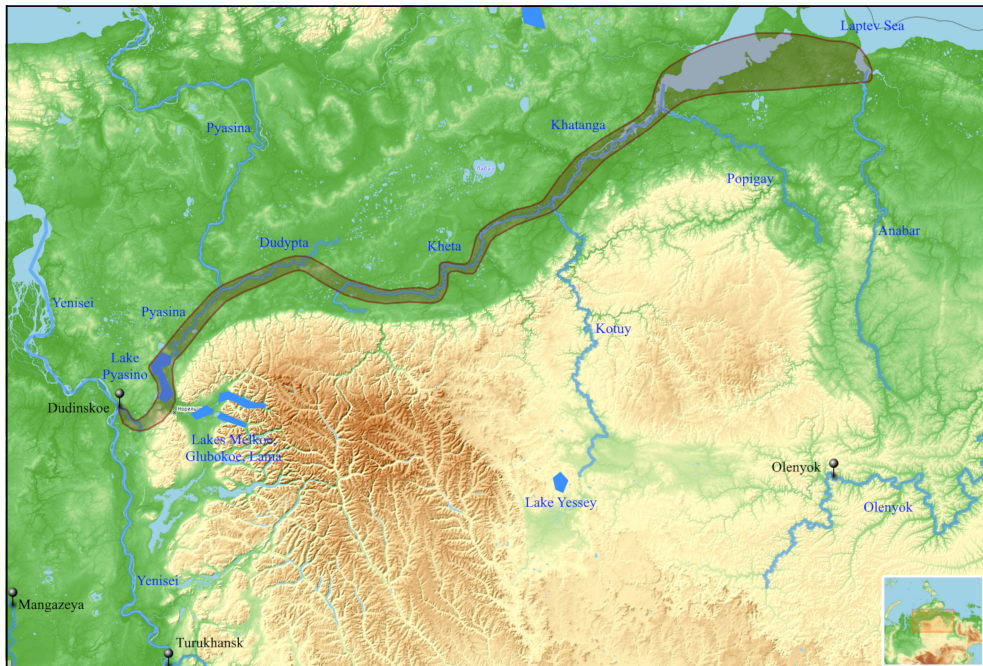
The Ewenki clans *Dongot*, *Edyan* and *Karanto* appeared on the Taimyr Peninsula from the south-east within the 18th and 19th centuries. There, they were dwelling to the east of today’s Norilsk (Dongots), around the lakes *Melkoe*,

Glubokoe and *Lama*, i.e. north-eastwards of today's Norilsk (Edyan), and at the river Boganida, a tributary of the river Kheta (Karanto) (Dolgich 1963: 111–115). Given their geographical origin (upper reaches of the river Lower Tunguska, Lake Yessey and river Olenyok), it seems plausible that Ewenki-Sakha bilingualism was common among those clans. As for the clans *Edyan* and *Karanto*, it is additionally worth mentioning that they eventually have a common origin with the Vadeyev Nganasans, i.e. a Tungusic group that became “nganasanized” until the 19th century (Dolgich 1963: 115; Forsyth 1992: 53). The Ewenks from Letnie and the Ilimpi region are later newcomers from the river Lower Tunguska, a right tributary of the Yenisei. The former arrived earlier on the Taimyr Peninsula, whereas the latter arrived probably only at the fin-du-siecle of the 19th and the 20th century (Dolgich 1963: 123–124). These Ewenki groups mostly settled around the lakes to the south and the east of today's Norilsk, e.g. at the lake *Khantayskoe Ozero*. As they did not come from a region where Sakha people were present, they were assumingly Ewenki-speaking when arriving on the Taimyr Peninsula.

The *Tundra Yakuts* appeared on the Taimyr Peninsula already in the late 17th century: in 1699, some Sakha people were reported to pay their yasak at the river Kheta (Dolgich 1963: 117). Probably, they came from the Lena basin and formed a continuum with the Sakha people living in the north-western part of nowadays' Republic of Sakha. The centre of the *Tundra Yakuts* was allegedly Khatanga (Dolgich 1963: 118); however, they seem to have settled along the whole rivers Kheta and Khatanga as well as in the territory east of Khatanga. The *Yessey Yakuts* are another Sakha group that appeared on the Taimyr Peninsula lately, probably not earlier than the 19th century. Coming originally from the Lena basin, they wandered north-westwards to Lake Yessey, where they settled for some time until moving further to the river Kheta on the Taimyr Peninsula (Dolgich 1963: 122).

Finally, few Nenets and Enets people played a marginal role in forming the Dolgan people via interethnic marriages with representatives of the above-discussed groups (Dolgich 1963: 124). As for Enets, these individuals belonged to a sedentary group of Tundra Enetses that dwelled to the east of Lake Pyasino. At the latest, they were assimilated by the Dolgans at the beginning of the 20th century (Khanina et al. 2018: 115).

Putting all this in a nutshell, during a short period from the 17th to the 19th century, many different groups and people emerged on the Taimyr Peninsula, more precisely, along the rivers Kheta and Khatanga as well as further north-eastwards to the lowlands of the river Anabar. Several tendencies are apparent regarding the geographical distribution of the indigenous people settling at the Taimyr Peninsula. Enetses inhabited its westernmost part, on the right shore of



MAP 4 Khatanga Trading Way

the river Yenisei: Forest Enetses to the south of Dudinka, and Tundra Enetses to the north of Dudinka (Khanina et al. 2018: 114–116). Nganasans inhabited the Arctic tundra on the northern side of the axis Dudinka-Khatanga: Avam Nganasans to the west of Lake Taimyr and Vadeyev Nganasans to the east of Lake Taimyr (Wagner-Nagy 2019: 4). All newcomers mentioned above settled along the axis Dudinka-Khatanga-Anabar: Thereby, the Ewenki people settled rather to the west of Khatanga, whereas the Sakha people settled rather to the east of Khatanga, though not without exceptions (Stern 2012: 84–90).

The Russian expansion to Siberia reached the Taimyr Peninsula as early as in the first decades of the 17th century. After the erection of the fortress of Mangazeya on the shore of the river Taz in 1601 (Forsyth 1992: 36), as early as in the 1620s, the *Khatanga Trading Way* came into being. A chain of trading bases—*stanoks* in Russian—was founded along a route from the settlement *Dudinskoe* on the right shore of the Yenisei via the river Dudinka, the Lake Pyasino, the rivers Pyasina, Dudypa, Kheta and Khatanga up to the mouth of the river Anabar into the Laptev Sea (Stern 2012: 80), as can be seen in Map 4.

However, one should not over-estimate the dimension of those trading bases since they mainly consisted of maximally a handful of huts and barely provided a place for spending the night. The Khatanga Trading Way served primarily

for satisfying the Russian demand for furs of sables, Arctic foxes and other relevant animals. On this trading route, the Russian merchants got in touch with indigenous people since the latter provided transport and immeasurably important support surviving in the harsh Arctic climate. On the Western part of the route, rather Enetses and Ewenks served as guides; on the Eastern part, it was instead Sakha people (Stern 2012: 81). Together with the Russian merchants, the so-called Russian *Tundra Peasants* arrived on the Taimyr Peninsula. They were Old Believers, a group of newcomers to Siberia, which had refused to accept changes in the Orthodox Church in 1654. Initially having their centre in the Arkhangel region in European Russia, they fled from persecution by the state authorities and settled in remote areas of Siberia, such as the Altai mountains and the eastern shore of Lake Baikal (Forsyth 1992: 44). On the Taimyr Peninsula, they settled along the whole Khatanga Trading Way and played an important role in the further development of the Taimyr population (Dolgin 1963: 120).

Within the given constant contact situation, the traditional clan structure of both the Ewenks and the Sakha people lost its importance significantly, becoming obsolete at the end of the 18th century (Stern 2012: 125). Instead, the dynamics of trade and Christianization led to the emergence of a stable social milieu along the Khatanga Trading Way, which blurred the traditional ethnic categories. The ingroup language of this social milieu was Sakha with a noticeable Ewenki and local Russian substrate, and the people belonging to this social milieu began to call themselves “Dolgans” during the 19th century. In this context, starting with Janhunen (1988), Dolgan is often called “the lingua franca of Taimyr”. I tend to avoid this term since I assume it is too short-falling. Indeed, Sakha (and later Dolgan) may have served as a lingua franca among Ewenks, Sakha and Russian Tundra Peasants, but probably not among the Samoyedic population of the Taimyr Peninsula. Instead, the communication between Nganasans and Enetses on the one side and Ewenks, Dolgans and Russians on the other side made use of the Taimyr Pidgin Russian (also known as *Govorka*). This would have been obsolete if Sakha/Dolgan had been a lingua franca throughout the whole population of Taimyr (see also Stern (2012: Ch. 5.1, especially pp. 263–268) and Stapert (2013: 358–360) for critical discussions).

Having these social and linguistic patterns in mind, Stern (2012: 123) is probably right when claiming that “Dolgan” was initially rather a desirable social status on the Taimyr Peninsula than any kind of ethnicity. This is still visible in—admittedly more or less reliable—statistical data from the second half of the 19th century as well as from the first half of the 20th century (based on Tret’jakov (1871: 121) and Stern (2012: 100–104)). Two clear tendencies can be observed: The number of people calling themselves Dolgans and Sakha got sig-

CHART 2 Ethnic composition in the Turukhansk region^{a,b}

	1860	1897	1926
Dolgans	573	971	843
Sakha (“Yakuts”)	568	1207	1115
Ewenks (“Tungus”)	1487	?	581
Tundra Peasants	ca. 1000	–	–

- a The Turukhansk region (Russian *Turuchanskij Kraj*) is the administrative predecessor of the Taimyr Autonomous Okrug, the former being larger and including also the settlement of Turukhansk as well as the forest tundra between the Taimyr Peninsula and the river Lower Tunguska.
- b The gap in the data on Ewenks (1897) and Tundra Peasants (1897 and 1926) has different reasons: Data on Ewenks in 1897 simply appear to be missing, whereas the category of Tundra Peasants had become obsolete and was, thus, not listed anymore.

nificantly higher, and the number of people calling themselves Ewenks and Tundra Peasants got substantially lower, the latter not even being present in the later data anymore.

Given the assumption that Sakha functioned as an ingroup language among Sakha, Ewenki and Russian people along the Khatanga Trading Way, the people appear to have categorized themselves or were categorized according to either their social status (Dolgan) or their language (“Yakut”). Only in early Soviet times, the term “Dolgan” gained its—partly artificial—ethnic connotation (Stern 2012: 101). Coming back to the discussion of Dolgan endonyms in Section 1.2, this immediately explains why many Dolgans still tend to call themselves *haka(lar)* in ingroup contexts but are well acquainted with *dolgan* in outgroup and official contexts. Consequently, the number of people calling themselves Dolgans on the Taimyr Peninsula is constantly around 5,000 in the censuses during the second half of the 20th century and in the early 21st century (Stern 2012: 99).

The Soviet impact on Dolgans and other people on the Taimyr Peninsula began in the late 1920s. In 1930, the Taimyr Autonomous Okrug was founded, and in the following time, collectivization started operating. Dolgan reindeer herders were expropriated, which made them participate in the—finally unsuccessful—Volochnanka uprising in 1932 (Stern 2012: 166). In 1935, the town of Norilsk was founded to exploit the surrounding mineral resources (mainly nickel, but also copper and cobalt), wherefore the Dolgan dwelling lands vanished (Forsyth 1992: 310; Stern 2012: 170). Within the emerging kolkhozes around today’s settlements of Volochnanka and Ust’-Avam, Dolgan-Nganasan contacts

and bilingualism came into being for the first time but remained marginal until the 1970s (Forsyth 1992: 385–386; Stern 2012: 168–169). By the 1970s, all indigenous people of the Taimyr Peninsula were sedentarized in settlements, and aerial transport took over the tasks from boats and cargo sledges—the Khatanga Trading Way, thus, lost its significance altogether. In parallel, the traditional Dolgan way of life (see below) was also given up almost completely (Stapert 2013: 46–47). Consequently, the Dolgans became dependent on external material supply provided by the Soviet authorities, the living conditions, nevertheless, being relatively good in the settlements. The collapse of the Soviet Union and the transition to a radical market economy led to the economic downfall of the remote settlements. Nowadays, the visible consequences are disemployment, lack of perspectives, migration to the larger towns, and alcoholism (Stapert 2013: 48). Although there are valuable initiatives for consolidating the settlements, it remains an open question to what extent they can stop the ongoing processes effectively.

1.4 Traditional Way of Life

Given their very diverse background and their relatively recent ethnogenesis (see Section 1.3), it is difficult to say what is *the* traditional way of life of the Dolgan people. Forsyth (1992: 177) puts it as follows: “Combining Ewenki use of reindeer for riding and pack-carrying with the Samoyed technique of harnessing reindeer to sleighs, and the use of herd-dogs, the Dolgans lived chiefly in conical Tungus wigwams, although some built earth-covered lodges of the Yakut type or even Russian log-cabins”. As pointed this statement may be, it characterizes the Dolgan way of life in the 18th and 19th centuries more or less appropriately, whereby some tightly interwoven aspects appear to be dominant: semi-nomadism, reindeer herding and hunting.

In the harsh Arctic winters, the Dolgans were living fairly settled at the edge of the forest-tundra, which is almost exactly the route of the Khatanga Trading Way (see Section 1.3 above). Winter housing was traditionally pole tents as well as pit-dwellings (rather Ewenki predecessors in the west) and winter yurts (rather Sakha predecessors in the east) (Popov 1934: 122–123). During the 19th century, however, sledge houses (in Russian: *balok*) overtook this function. These sledge houses contained the whole household, including an oven, and were moved by reindeer pulling them if necessary. Most probably, Russian merchants brought them to the Taimyr Peninsula (Popov 1934: 124; Stern 2012: 82). In winter, the relatively small reindeer herds of the Dolgans—according to Popov (1934: 125) a couple of dozen reindeer per family—were kept individu-

ally by each family in walking distance to the winter camp. The close distance was necessary since the pasture for the reindeer had to be changed several times in winter. In summer, the reindeer herds of neighbouring families were united, and the Dolgans migrated with them to the Arctic tundra in the north, following the wild reindeer herds. Thereby, it has to be kept in mind that the migrations were considerably shorter in both time (May to October) and distance (ca. 100 to 200 kilometres) than, e.g. in the case of the neighbouring Nganasan people (Popov 1934: 123; Stern 2012: 77, 83, 94). The diet of the Dolgans was based on hunting and, to a lesser extent, fishing, the most important prey being the wild reindeer (Stern 2012: 91). With the adventure of the Russian merchants, the Dolgans got involved in guiding and transporting Russian merchants between the trading stations in winter (Stern 2012: 82). During the 19th and early 20th centuries, they began to participate more and more in trade themselves. Nevertheless, until the forced sedentarization in Soviet time—i.e. until the 1970s—the Dolgans kept their semi-nomadic way of life. Nowadays, much knowledge and many traditions have been lost; thus, reindeer herding and migrations in the tundra have become much less widespread. However, in the remote settlements closer to the border to the Republic of Sakha, i.e. Novorybnoe, Syndassko and Popigay, reindeer herding is more common and at least partially handed over to younger generations (Stapert 2013: 17–18).

Both the traditional way of life and the material culture of the Dolgans exhibit a mixture of Tungusic, Turkic and even Samoyedic elements (Dolgich 1963: 131). A detailed description goes far beyond the scope of this grammar; the reader is therefore referred to the excellent ethnographical works of Aleksei A. Popov (1934, 1935, 1937a, 1937b, 1946, 1952) and more recently of John Ziker (1998, 2002).

1.5 The Language

1.5.1 *Typological Overview*

From a typological point of view, the structure of Dolgan is dominated by its complex morphonology, agglutinative morphology and head-final syntax.

Both the vowel and the consonant system are mid-sized (8 vowels plus 4 diphthongs, 17 consonants). The vowel system is perfectly symmetrical, structured by the parameters [\pm palatal/front, \pm labial/rounded, \pm high/closed]. Palatal and labial vowel harmony is active in both stems and suffixes. Within the consonant system, the weak position of voice as a distinctive feature is noticeable: Apart from labial (*p* and *b*), coronal (*t* and *d*) and velar (*k* and *g*) plosives, there are no phonemic voice distinctions in the system. Also, the listed plosives

tend to be distributed in an allophonic manner, but at least for the former two couples, minimal pairs can be established. At morpheme boundaries, consonants exhibit a wide range of assimilations in Dolgan. Combined with vowel harmony, this leads to a high degree of allomorphy concerning suffixes: e.g. the postterminal past tense suffix -BIT has as much as 36 allomorphs (initial $b \sim p \sim m$; middle $i \sim \dot{i} \sim u \sim \ddot{u}$; final $t \sim p \sim k$).

The Dolgan morphology is systematically agglutinative and almost exclusively suffixing. The agglutinative structure is blurred in the possessive inflection of nouns and the imperative paradigm of verbs. Exceptions from the prevailing suffixing structure are the emphatic prefix *h-* and the partial reduplication of intensified adjectives, e.g. *kap-kara* 'jet-black; very black' < *kara* 'black'. Nominal morphology includes the categories number, case and possession, as well as nominal predication. Dolgan exhibits singular and plural number, whereby the singular forms are homonymous with underspecified number forms. The case system of Dolgan includes eight cases and is, thus, slightly larger than in most other Turkic languages. Possessive suffixes refer morphologically to the possessor in adnominal possessive constructions, and nominal predicative suffixes "replace" a copula in some types of non-verbal predication.

The Dolgan verbal morphology is highly complex. First, three sets of personal endings are systematically distributed over the verbal categories and paradigms. Finite and non-finite forms are no discrete categories in Dolgan from a morphological point of view, but syntax disambiguates them in nearly all instances. Many finite forms are based on non-finite forms. Tense and aspect are tightly interwoven in Dolgan and cannot be separated from each other in a meaningful way. There are one present tense, five past tense, and one future tense forms, accompanied by one imperfect, two habitual and two abessive forms. Additionally, postverbal constructions consisting of a converb and a finite auxiliary verb play a role in expressing aspect and actionality. Coming to modality, Dolgan represents a typical Siberian language rather than a typical Turkic language: There are 13 moods, expressing mostly epistemic and deontic modality. Finally, Dolgan has one synthetic evidential form, the inferential; apart from this, evidentiality is concomitantly expressed by both tense-aspect and mood forms.

Coming to syntax, head-finality with all its entailments (SOV word order, modifiers and possessors preceding their head noun, postpositions) is most characteristic for Dolgan. Within noun phrases, no agreement of modifiers and the head noun can be observed; possessors in adnominal possession call for the realization of a possessive suffix at the item referring to the possessee. Verb phrases include a verb and up to three arguments, whereby synthetic

valence-changing operations often permute the subcategorization of the verb. Given the unambiguous person-number marking of subjects at the verb, pronominal subjects do not have to be realized overtly. Verbal predications show nominative-accusative alignment, the S- and A-argument being unmarked, the P-argument exhibiting differential object marking. In non-verbal predications, predicate nominals and predicative adjectives fall together, the person-number of the subject being marked either via nominal predicative suffixes or a copula. Locative and existential predications only differ in word order and information structure. Both are formed with the existential nouns *bar* and *huōk*, which is typologically uncommon since the strategy is taken over from existential to locative predication and not the other way round. Finally, the basic word order SOV is frequently permuted due to information structural patterns, yielding a clause-initial topic and an immediately preverbal focus position. The complex of negation is manifold in Dolgan, whereby standard negation oscillates between symmetric and asymmetric patterns. Clause combining in Dolgan can be established via clause chaining, coordination and subordination. Clause chains are based on one converb form and one finite verb form, often being ambiguous between a lexical and an aspectual or actional reading of the finite verb included. Coordination means mostly juxtaposition, and subordination is realized via non-finite clauses, whereby one modal form (temporal-conditional mood) forming adverbial clauses has to be analyzed as finite from a synchronic point of view.

1.5.2 *Dolgan as a Turkic Language*

The Dolgan language belongs to the northern group of the north-eastern branch of the Turkic language family (Johanson 2021: 21–24), as displayed in Figure 1.

The closest relative of Dolgan is Sakha, which is spoken by ca. 450,000 people, mainly in the Republic of Sakha in the Russian Federation. Linguistically, Dolgan and Sakha are close to each other and mostly mutually intelligible, forming a continuum of varieties. Given this continuum and the unequal distribution of speakers, Dolgan was considered a dialect of Sakha for a long time. Nowadays, Dolgan is fairly unanimously considered a language of its own, both within and outside the language community. From a purely structural linguistic point of view, it could indeed be argued that Dolgan forms part of the North-Western Sakha dialect continuum. Nonetheless, there is a strong awareness of the existence of a separate Dolgan language, especially within the language community: During my fieldwork in Dudinka in 2017, I often heard my informants emphasizing differences between Dolgan and Sakha. Additionally, as is shown at several points in this grammar, there are pretty many linguistic

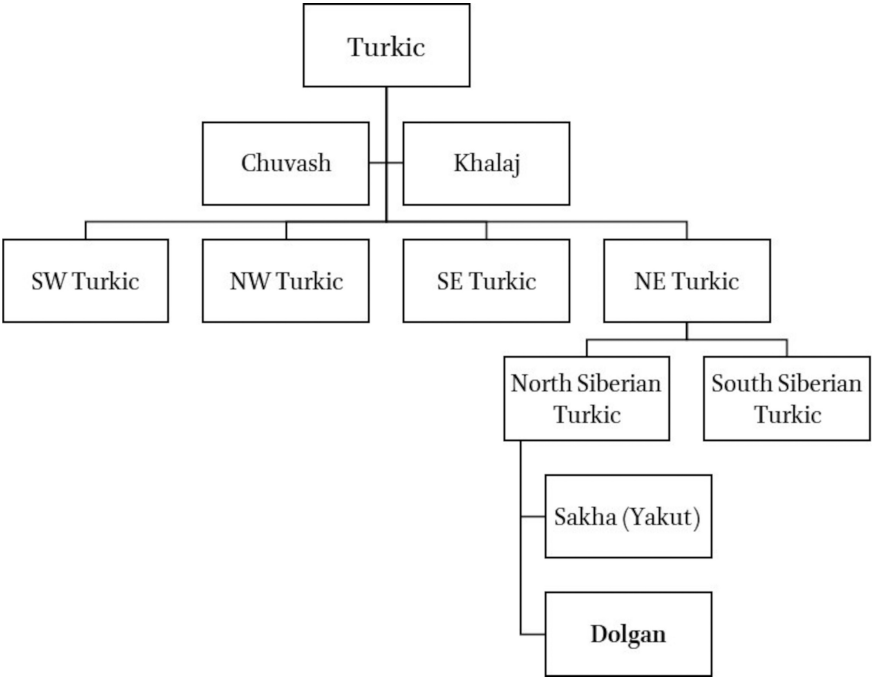


FIGURE 1 Dolgan within the Turkic language family

differences, which may be not apparent at first glance, but necessary to note and have in mind for an accurate description.

Coming to the position of Dolgan within the Turkic language family, it is a typical representative of the family, i.e. it shares many structural features with other Turkic languages. Some divergences, however, are apparent, whereby several patterns occur:

- (1a) archaisms shared with Sakha, but otherwise absent,
- (1b) archaisms not shared with Sakha, and otherwise absent as well,
- (2a) innovations shared with Sakha, but otherwise absent,
- (2b) innovations not shared with Sakha, and otherwise absent as well.

Since the grammar at hand has a clear synchronic orientation, only a few non-exhaustive examples shall serve as an illustration of these patterns.

Pattern (1a) can well be shown by the reflexes of Proto-Turkic long vowels in both Dolgan and Sakha. Whereas most modern Turkic languages exhibit no long vowels at all (except Turkmen and Khalaj), in Dolgan and Sakha, long high vowels and **a:* are retained, and long low vowels have diphthongized.

Pattern (1b) is relatively rare, but one comprehensive feature can be named: In a handful of lexemes (e.g. *in'e* 'mother', *an'i:* 'sin', *an'ak* 'opening; mouth', *men'i:* 'head'), Dolgan preserves Proto-Turkic **ñ*, whereas the Sakha counter-

CHART 3 Retention of long vowels in Dolgan and Sakha^a

Meaning	Turkish	Dolgan	Sakha	Proto-Turkic
hundred	yüz	hü:s	sü:s	*jüz ~ *jür
ice	buz	bu:s	bu:s	*bu:z ~ *mu:z
one	bir	bi:r	bi:r	*bi:r
girl; daughter	kız	kî:s	kî:s	*qî:z
lake	göl	küöl	küöl	*kö:l
way; path	yol	huöl	suöl	*jo:l
give	ver-	biër-	biër-	*be:r-
there is	var	ba:r	ba:r	*ba:r

a Note that the Turkish data given here is written in Standard Turkish orthography, and not in phonological or phonetic transcription. The Sakha and Proto-Turkic data is represented analogically to the Dolgan data (see Section 1.6.2 for a concise description) for the sake of comprehensiveness.

parts exhibit a nasalized *j* (Anderson 1998: 24). In most other Turkic languages, **ñ* has also turned into *j*. However, data from Khalaj—and Dolgan as well—show that a nasal origin is more plausible than a glide, as can be exemplified by derivatives of the interrogative stem **qa:ń ~ *qa:n ~ *qa:j*: Khalaj *qa:ʔni* ‘which one’, which is cognate with the Dolgan placeholder item *kan’a:-* ‘do what; whatchamacallit’ (Johanson 1998b: 106; Däbritz 2018a: 290; Johanson 2021: 525).

Pattern (2a) is illustrated by the re-interpretation of the Proto-Turkic locative case displayed by the suffix **-DA*. In both Dolgan and Sakha, the suffix is formally retained as *-TA*. However, it has no locative function anymore but expresses the partitive case (see Section 4.2.2.4 for details). In contrast, in most other Turkic languages, the reflexes of Proto-Turkic **-DA* still express the locative case (Johanson 2021: 466).

Pattern (2b), finally, is illustrated by the probably most distinctive feature of Dolgan, namely the emergence of word-initial *h-*: Proto-Turkic **j-* and **č-* yield *h-* in Dolgan, but *s-* in (Standard) Sakha, e.g. Dolgan *hü:s* ‘100’, (Standard) Sakha *sü:s* ‘id.’ < PT **jüz ~ *jür* > Turkish *yüz* ‘id.’. Thereby, the Dolgan reflex appears to be more innovative than the Sakha reflex since the process **j- ~ *č- > s- > h-* is more common from a historical linguistic point of view than the opposite process **j- ~ *č- > h- > s-*. Additionally, the shift *s > h* occurs in neighbouring Northern Ewenki dialects, cf. Northern Ewenki *hulaki:* ‘fox’ vs Southern Ewenki *sulaki:* ~ *šulaki:* ‘id.’ (Vasilevič 1958: 368, 492). According to Ubrjatova (1985: 32), the process *s > h* in Dolgan is due to Ewenki substrate, which is entirely plausible since Ewenki loanwords in Dolgan exhibit it as well, e.g. Dolgan *huōna*

‘middle pole tent’ < Northern Ewenki *ho:na* ‘id.’ (vs Southern Ewenki *so:na* ‘id.’). Furthermore, several Sakha dialects exhibit *h*-initial forms, which suggests that the process *s* > *h* is an areal rather than a purely Dolgan phenomenon (see also Pakendorf 2008).

1.5.3 Sociolinguistic Data

The sociolinguistic status of Dolgan is challenging to evaluate since comprehensive data is rare, if not absent at all. As can be seen already from the census data of 2010 (7,885 Dolgans vs 1,054 speakers of Dolgan), the number of persons declaring themselves Dolgans exceeds the number of persons declaring themselves a speaker of Dolgan sevenfold. Additionally, 4,803 persons stated in the same census that their mother tongue is Dolgan. Thus, it is nearly impossible to give a reliable number of Dolgan speakers. However, it can be stated that there are significantly more speakers of Dolgan on the Taimyr Peninsula than speakers of the neighbouring languages Nganasan, Enets and Ewenki.

As for the sociolinguistic situation in the settlements where Dolgans live, a clear tendency towards increasing knowledge and usage of Dolgan from the south-west to the north-east can be observed. Whilst in the mixed settlements Ust'-Avam and Volochanka, Dolgan is hardly spoken by anyone in everyday life, the language is comparatively well preserved in the almost purely Dolgan settlements of Popigay and Syndassko, and also children speak it. Settlements in between these extremes, e.g. Katyryk, Kheta and Zhdanikha, can be regarded as transitory in this respect: Dolgan can be heard to some extent, but not as regularly and frequently as in the remote north-eastern settlements (Siegl 2013a: 8; Stapert 2013: 17–19). The Dolgan community in the district capital Dudinka behaves differently from the Dolgan communities in the settlements. Judging from my field experience, the Dolgans living in Dudinka have a strong awareness of their identity and language. Many of them try to include it in their everyday lives. Moreover, the most active Dolgan cultural organizations have their headquarters in Dudinka, which provides a good base for conserving the Dolgan culture and language. On the other hand, the urban environment certainly makes it hard to “stand back” from the usage of Russian in everyday life.

Generally speaking, Russian is the dominant language in all official spheres of life, the most crucial domain being the school, where the language of education is without exception Russian (Stapert 2013: 14). To some extent, there is teaching of Dolgan, but always as a foreign language with a small number of lessons within a week (Siegl 2013a: 10–16). Compared to other indigenous languages of the Taimyr Peninsula, however, the situation is more prospective since there are more qualified teachers on the one hand and more teaching

materials (including Artem'ev's (2013) three-volume teaching grammar) on the other hand. In the local media (e.g. radio and newspaper), broadcasts and texts are published in Dolgan on quite a regular basis (Siegl 2013a: 16–18). Thus, Dolgan is somehow present in official spheres of life but in no competitive position to Russian. All in all, Dolgan has to be regarded as the language of the family and private spheres of life, if it all.

As can be expected from the discussion above, Dolgan is primarily a spoken language. Nevertheless, there exists an orthography for the Dolgan language since the 1970s, and several attempts towards standardization have been made. The Dolgan orthography uses the Cyrillic script and is based on the Sakha orthography developed earlier. Nevertheless, it accounts for the phonological/phonetic peculiarities of Dolgan, e.g. in the case of velars and uvulars, where Dolgan differs from Sakha. Thanks to the straightforward Dolgan sound system, also the orthography is very transparent and systematic: Generally, one grapheme represents one phoneme (exception: /d'/ and /n'/ are marked with the digraphs <д'> and <н'>), and two graphemes mark long vowels, diphthongs and long consonants. Morphological alternations, such as vowel harmony and consonant assimilations, are consistently indicated. Dolgan as a written language is applied to some extent in belles lettres (both prose and poetry), whereby the poetress Evdokija "Ogduo" Aksënova (1936–1995) is by far the most famous representative. Additionally, the weekly newspaper "Taimyr"⁸ contains a few pages in Dolgan dealing with and discussing current locally relevant topics. Chapter 13 includes both a Dolgan prose text and an extract from the newspaper "Taimyr" to show this minor but still important domain of Dolgan.

Bi- and multilingualism is common among Dolgans, as it was in earlier times, too. However, the patterns of multilingualism changed significantly under the historical processes described in Section 1.3. During the Dolgan ethnogenesis from the 17th to the 19th centuries, Ewenki-Sakha bilingualism was apparently the most frequent pattern, which is corroborated by the parallel migrations of Ewenki and Sakha people north-westwards and much Ewenki substrate in the Dolgan language (Ubrjatova 1985: 11–12). In the 19th and early 20th centuries, Sakha/Dolgan was the dominating variety along the Khatanga Trading Way, which entailed Sakha/Dolgan-Ewenki and Sakha/Dolgan-Russian bilingualism, as well as Sakha/Dolgan-Ewenki-Russian trilingualism (Stapert 2013: 160–161). These traditional sociolinguistic patterns began to change with the advent of the Soviet authorities on the Taimyr Peninsula in the 1930s. On the

8 <https://taimyr24.ru/gazeta/>, last access: 01.03.2022.

one hand, Dolgans came into closer contact with Nganasans for the first time, which led to Dolgan-Nganasan bilingualism (Stern 2012: 168–169). Even more impactful was undoubtedly the implementation of Russian educational institutions. Within the *LikBez* (= Russian *likvidacija bezgramotnosti* ‘liquidation of analphabetism’) campaign, mobile schools (Russian *kočevye školy* ‘nomadizing schools’) as well as the *Red Chum* (organization for adult education) were introduced. However, these approaches did not lead to an extensive alphabetization of the Dolgans, neither of children nor adults (Stern 2012: 171–172). Later on, school education was organized in boarding schools, meaning Dolgan and other indigenous children only spent the first six years of their lives with their parents. Afterwards, they passed the school year in the boarding school and visited their families only on vacation (Stapert 2013: 162–163). This led to the widespread emergence of Dolgan-Russian bilingualism, the consequences of which were described at the beginning of this section. Indigenous bi- or multilingualism, in turn, has lost its significance to a high degree, though in the eastern settlements (mainly Syndassko and Popigay), Dolgan-Sakha bilingualism is present. Finally, given the nearly monolingual Russian school education and the overall presence of Russian in modern (social) media, there is a tendency towards monolingualism in Russian among the Dolgans, too.

1.5.4 *Dialects*

The Dolgan language can be divided into two dialects, namely the Upper Dolgan (*ūōhe:gi*) and the Lower Dolgan (*allara:gi*) dialects, the denomination referring to the flow direction of the rivers Kheta and Khatanga (Stachowski 1998: 126; Artem'ev 2013a: 9–10; Stapert 2013: 7). The Upper Dolgan dialect is spoken along the upper reaches of the river Kheta (settlements: Khantayskoe Ozero, Ust'-Avam, Volochanka, Katyryk). Formerly, it was also spoken in the area of today's Norilsk, but the foundation of the town and the erection of mines destroyed the local Dolgans' livelihood. The Lower Dolgan dialect is primarily spoken along the lower reaches of the river Khatanga and farther north-eastwards towards the border to the Republic of Sakha (settlements: Zhdanikha, Novorybnoe, Syndassko). There is no clear border between Upper and Lower Dolgan, but the settlements Kresty, Kheta, Novaya and Khatanga are transitory. The Dolgan variety spoken in the easternmost settlement Popigay already appears to represent a transitory variety between Lower Dolgan and Anabar Dolgan, the latter being spoken in the *Anabarskij Ulus* in the north-westernmost part of the Republic of Sakha. Speakers of Dolgan are well aware of the division between Upper Dolgan(s) and Lower Dolgan(s), which can be shown by example (1) from a text told by a speaker born and grown up in

Katyryk, thus, in an Upper settlement. Note that the denominations “Upper” and “Lower” not necessarily point to sharp dialectal borders but rather to a relative demarcation, judging from the speaker’s own variety.

- (1) *Horok-tor tokto:-but-tar iti allara: pas’olok-tar diēk—*
 some-PL stop-PST2-3PL that lower settlement-PL towards
Ha:tanga-ga, Kirîēs-ka, Novaj-ga, Kiēta:-ga.
 Khatanga-DAT/LOC Kresty-DAT/LOC Novaya-DAT/LOC Kheta-DAT/LOC
 ‘Some [Dolgans] stayed there in the lower villages—in Khatanga, Kresty,
 Novaya and Kheta.’
 (BeES_1997_HistoryOfKatyryk_nar.017)

Although historically, Upper Dolgan was spoken around Dudinka and today’s Norilsk, this does not hold anymore today since the Dolgan community in Dudinka stems from all over the Dolgan area. Therefore, their speech cannot uniformly be classified as belonging to either Upper or Lower Dolgan but depends on the speaker’s provenance. From the ethnographical and historical background described in Section 1.3, it can be expected that the Upper Dolgan dialect exhibits more Ewenki substrate influences than the Lower Dolgan dialect. However, the differences between the two dialects appear to be relatively marginal, and mutual intelligibility is never compromised. A comprehensive dialectological investigation goes far beyond the scope of this grammar, but the essential features shall be named here nevertheless.

Within the lexicon, several lexemes appear only in one or the other dialect, which eventually leads to parallel forms. Again, the tendency can be observed that the Lower and easternmost varieties (especially in Popigay) are closer to Sakha than the Upper varieties. Chart 4 gives some examples of them (based on the INEL Dolgan Corpus as well as the dictionaries of Stachowski 1993a and Barbolina et al. 2019).

Within morphosyntax, five differences between the dialects can be named.

1. The quantifier *bari* ~ *barita* (see Sections 3.4.7 and 7.1.2.5.2) exhibits different syntactic patterns: In Upper Dolgan, both preposed *bari* (followed by the head noun, most often in its unmarked form) and postposed *barita* (following the head noun in its unmarked form) occur. In Lower Dolgan, only postposed *barita* occurs.
2. Indefinite pronouns can be formed among others with the particle *ere* in all varieties, whereas Upper Dolgan also has the phonetic variant *ire* (see Section 3.3.2.5).
3. The anterior converb -A:t nearly exclusively occurs in Upper Dolgan speech forming temporal adverbial clauses (see sections 6.3.2.4 and 9.3.3.1).

CHART 4 Dialectal differences in the lexicon

Lexeme	Upper Dolgan	Lower Dolgan
‘tundra’	<i>mūōra</i>	<i>tīā</i>
‘father’	<i>aga</i> <i>te:te</i>	<i>te:te</i>
‘plant’	<i>ot(tor)</i>	<i>ü:ne:ji</i>
‘very’	<i>mija: ~ min’a: ~ muja ~ mun’a</i>	<i>bagaji ~ bagaj</i>
(modifying adjectives)	<i>bagaji ~ bagaj</i>	
‘milk’	<i>emij</i>	<i>emij</i> <i>ü:t</i> (Popigay)
‘butter’	<i>ma:sla</i> (< Russian <i>maslo</i> ‘id.’)	<i>ma:sla</i> <i>ari:</i> (Popigay)
‘without antlers’	<i>n’ejčē:n</i> (< Ewenki <i>ni:ŋčə:n</i> ‘id.’)	<i>n’ejčē:n ~</i> <i>kultumak</i> (Popigay)
‘nail’	<i>kati:</i>	<i>kati:</i> <i>tejge</i> (Popigay)
‘black (of reindeer)’	<i>koŋnomuōj</i>	<i>kara</i>

- 4. The analyzed material implies that only in Lower Dolgan, forms of the negative simultaneous converb -BAkkA occur with person-number suffixes (see Section 6.3.2.3).
- 5. Stapert (2013: 256) mentions that SVO word order is more common in Upper Dolgan than in Lower Dolgan, whereby the former would rather follow the Russian pattern and the latter the Sakha pattern. Irrespective of the functional explanation, the observed tendency can be cautiously confirmed by the material analyzed here. Whereas in Upper Dolgan speech, the ratio is ca. 14 % SVO vs ca. 86 % SOV in relevant clauses, it is ca. 9 % SVO vs ca. 91 % SOV in Lower Dolgan.

To sum up, one can say that there are indeed some dialectal differences within Dolgan, separating Upper Dolgan from Lower Dolgan. As a tendency, Lower Dolgan (and Anabar Dolgan) speech is more similar to Sakha than Upper Dolgan speech. However, the topic definitely calls for further research given the strong awareness of dialects by the speakers compared to the relatively few relevant phenomena observed.

1.6 Material and Data

As stated in Section 1.1, the grammar at hand is mainly corpus-based and aims to describe natural and spontaneously spoken language. Given this, the material and data forming the empirical base of the grammar call for a thorough description provided in the upcoming sections.

1.6.1 INEL Dolgan Corpus

The grammar at hand relies to a great extent on data provided by the INEL Dolgan Corpus (Däbritz et al. 2019). Additional data from elicitation and published works are taken into account sporadically. The INEL Dolgan Corpus has been described in a range of works (Däbritz 2020a–c). Therefore, only the aspects immediately relevant for the grammar are mentioned here. The INEL Dolgan Corpus provides an open-access digital resource for the Dolgan language having as balanced a provenance as possible, as transparent a linguistic representation as possible and as accessible a technical representation as possible (Däbritz 2020c: 69). These three aspects are commented on in what follows.

The INEL Dolgan Corpus includes 116 transcripts⁹ with 11,871 utterances and 77,764 tokens from 61 speakers (33 female, 28 male). 81 transcripts can be linked to a corresponding audio file, yielding 10:42:14 hours of transcribed and analyzed audio material. The material included in the INEL Dolgan Corpus comes from four different sources:

- Digitized texts from the published volume *Folklor Dolgan* [FD 2000] (Efremov 2000) (35 transcripts),
- Audio material obtained from the *Taimyr House of National Arts* (TDNT)¹⁰ (51 transcripts),
- Audio material obtained from the collection of Eugénie Stapert (26 transcripts) and
- Audio material collected during fieldwork in Dudinka in 2017 (4 transcripts).

As for genres occurring in the corpus, five of them can be distinguished: *folklore* (flk), *narrative/everyday stories* (nar), *conversations* (conv), *translations* (trans) and *songs* (sng). As shown in Figure 2, folklore and narrative texts make up roughly two-thirds of the transcripts and tokens included in the corpus. Moreover, older transcripts tend to be folklore texts, whereas more recent transcripts are more often narrative texts or conversations. The conversations

9 *Transcript* is used in this section as a technical cover term for *text*, *communication* and the like.

10 <http://tdnt.org/>, last access: 01.03.2022.

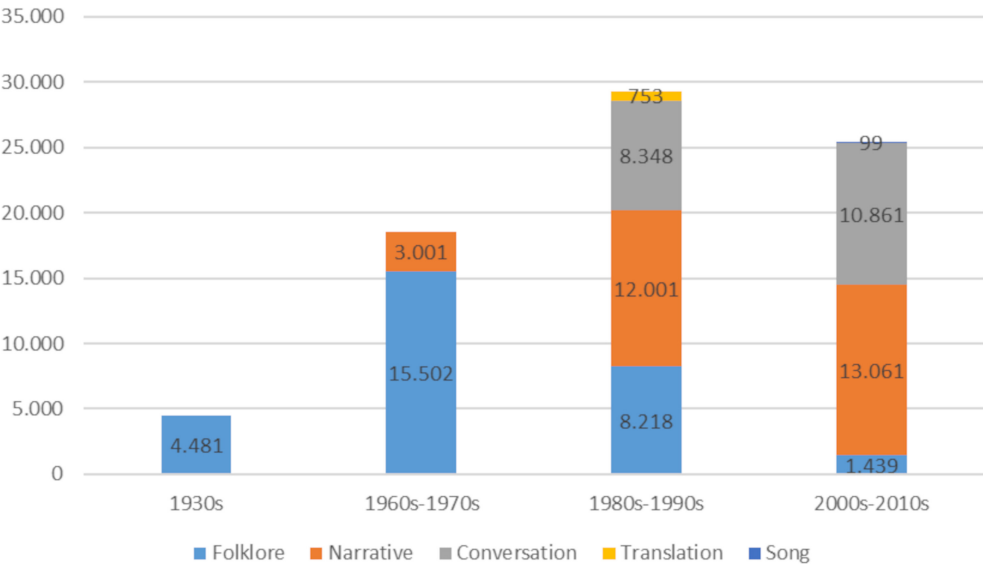


FIGURE 2 Tokens per genre and period in the INEL Dolgan Corpus

included are mostly radio interviews and exhibit, thus, authentic and spontaneous Dolgan speech. In many such transcripts, the speakers are initially aware of the recording setting but soon appear to forget about it and begin to talk freely without minding their speech. As for the timeframe represented in the material, two periods of cumulation can be mentioned: The 1930s and 1960s are represented almost exclusively by the material coming from [FD 2000], whereas the material obtained from the TDNT comes to a large extent from the 1980s to the 2000s.

The dialectal provenance of the transcripts included in the INEL Dolgan Corpus is not entirely balanced, Upper Dolgan being represented in roughly two-thirds of the material, and Lower Dolgan in the remaining third. This Upper Dolgan overbalance is primarily due to the transcripts taken from [FD 2000] since Lower Dolgan material is almost absent there. The material obtained from the TDNT and Eugénie Stapert, as well as the recordings made in 2017, however, has a balanced dialectal provenance.

The material included in the INEL Dolgan Corpus is stored in the XML-based EXMARALDA-format¹¹ that allows for both browsing and searching the data conveniently. Each transcript is interlinearly glossed in three languages (English, German, Russian) and translated to these languages, too. Many tran-

11 <https://exmaralda.org/en/>, last access: 01.03.2022.

	242 [02.17.0]	243 [02.17.5]	244 [02.18.0]	245 [02.18.5]	246 [02.19.2]	247 [02.19.8]	248 [02.20.4]	249 [02.21.0]
ref	SuAA_20XX_Birth_nar.029 (001.029)							
st	Оччого буоллагына дуо бу баабускаҥ кэлэр ураһа дьиэҥэ, төрүүр дьиэҥэ, дыукааҥа.							
ts	Oččogo buollagina dūo bu ba:buskaŋ keler uraha d'iege, tōrūr d'iege, d'ukaaga.							
tx	Oččogo	buollagina	dūo	bu	ba:buskaŋ	keler	uraha	d'iege,
mb	oččogo	buollagina	dūo	bu	ba:buska-ŋ	kel-er	uraha	d'ie-ge
mp	oččogo	buollagina	dūo	bu	ba:biska-ŋ	kel-Ar	uraha	d'ie-GA
ge	then	though	MOD	this	midwife-2SG.[NOM]	come-PRS.[3SG]	pole.[NOM]	tent-DAT/LOC
gg	dann	aber	MOD	dieses	Hebamme-2SG.[NOM]	kommen-PRS.[3SG]	Stange.[NOM]	Zelt-DAT/LOC
gr	тогда	однако	MOD	этот	повитуха-2SG.[NOM]	приходить-PRS.[3SG]	шест.[NOM]	чум-DAT/LOC
mc	adv	ptcl	ptcl	dempro	n-n:(poss).[n:case]	v-v:tense.[v:pred.pn]	n.[n:case]	n-n:case
ps	adv	ptcl	ptcl	dempro	n	v	n	n
SeR	adv:Time				np.h:A			np:G
SyF					np.h:S	v:pred		
IST					giv-active			
Top					top.int.concr			
Foc						foc:int		
BOR					RUS:cult			
BOR-Phon					Vsub Csub			
BOR-Morph					dir:infl			
CS								
fe	And then the midwife comes into the tent, into the birth tent.							

FIGURE 3 Deep annotation in the INEL Dolgan Corpus

scripts contain further annotations, e.g. of *Syntactic Functions* (SyF), *Semantic Roles* (SeR) and *Information Status* (IST). The principles of annotation rely on Götze et al. (2007), Haig & Schnell (2014), Wagner-Nagy et al. (2018) and can be accessed in Däbritz (2020a). Figure 3 shows a transcript with all possible annotation layers.

In what follows, data from the INEL Dolgan Corpus is referred to by the first part of the unambiguous code provided in the upmost *ref*-tier. The sentence visible in Figure 3 would thus be referred to as *SuAA_20XX_Birth_nar.029*. Thereby, *SuAA* points to the speaker (Suzdalova, Antonina Alekseevna); *20XX* points to the date of recording (here, the exact year is not known); *Birth* is a short title of the transcript; *nar* indicates the genre (here: narrative/everyday story); and *029* points to the number of the utterance within the given transcript.

Finally, native speakers of Dolgan were involved in compiling the corpus as much as possible. It is especially noteworthy that Nina S. Kudrjakova (the

person responsible for Dolgan culture and folklore in TDNT), together with her relatives, transcribed and translated large parts of the TDNT material into Russian very reliably and quickly. Without this collaboration, the amount of material included in the corpus probably would have been considerably smaller. Additionally, on a fieldwork trip to Dudinka in summer 2017, the work with Dolgan informants brought the project significantly forward.

1.6.2 *Transcription Conventions*

The grammar at hand follows the same transcription principles, which are applied in the INEL Dolgan Corpus as well as in the other INEL corpora (see Arkhipov 2020 for details). The transcription is, thus, a Latin-based phonological transcription, which combines features from IPA and the Finno-Ugric Transcription (FUT). This choice is to provide a transcription as transparent and accessible as possible for all languages worked on in the INEL project.

As for Dolgan, the following aspects are worth mentioning: Vowel length is marked by ⟨V:⟩, i.e. the Unicode sign “Modifier Letter Triangular Colon” after the vowel grapheme. Consonant length is indicated by doubling the consonant grapheme. Diphthongs are marked by ⟨V̂V⟩, i.e. both components of the diphthong combined with the Unicode sign “Combining Double Inverted Breve”. Palatalization is marked by ⟨C'⟩, i.e. the consonant grapheme together with the Unicode character “Modifier Letter Apostrophe”. These transcription principles differ slightly from those developed in *The Turkic Languages* [TL] and *Turkic* (see Johanson & Csató 1998, Johanson 2021: Ch. 2). Most importantly, vowel length is indicated by ⟨V̂⟩ in [TL], and the high illabial velar vowel is written ⟨i⟩ in INEL, but ⟨ḭ⟩ in [TL] and *Turkic*. Chart 5 summarizes the transcription applied and compares it with both IPA and the standard turcological transcription.

Most of the transcription is written in small letters. Only the first letters of sentences (i.e. after a full stop, question mark, exclamation mark) and the first letters of proper nouns are written in capital letters; direct speech is indicated with double inverted commas. Nouns are referred to by their bare stem homonymous with the nominative case in the running text, e.g. *taba* ‘reindeer’. In the case of verbs, a hyphen follows the stem, e.g. *bar-* ‘go’, since Dolgan lacks a lexicon form for verbs.

If Dolgan data from other data than the INEL Dolgan Corpus is cited here, the transcription is adapted according to the abovementioned principles. In the relevant cases, this is mentioned explicitly.

CHART 5 Transcription

INEL transcription	IPA correspondence	Turcological transcription	Meaning
monophthongs			
a <i>at</i>	a <i>at</i>	a <i>at</i>	'horse'
e <i>ebe</i>	ɛ <i>ɛbe</i>	e <i>ebe</i>	'grandmother'
o <i>ogo</i>	ɔ <i>ɔgɔ</i>	o <i>ogo</i>	'child'
ö <i>öl-</i>	œ <i>œl-</i>	ö <i>öl-</i>	'die'
ï <i>it</i>	i <i>it</i>	ï <i>it</i>	'dog'
i <i>ilim</i>	i <i>ilim</i>	i <i>ilim</i>	'net'
u <i>bu</i>	u <i>bu</i>	u <i>bu</i>	'this'
ü <i>üs</i>	y <i>ys</i>	ü <i>üs</i>	'three'
diphthongs			
iâ <i>ial</i>	iâ <i>ial</i>	iâ <i>ial</i>	'neighbour'
iê <i>bies</i>	iɛ̂ <i>bies</i>	iê <i>bies</i>	'five'
uô <i>uon</i>	uɔ̂ <i>uon</i>	uô <i>uon</i>	'ten'
üö̂ <i>tüört</i>	yœ̂ <i>tyært</i>	üö̂ <i>tüört</i>	'four'
consonants			
p <i>pa:s</i>	p <i>pa:s</i>	p <i>pās</i>	'deadfall'
b <i>bar-</i>	b <i>bar-</i>	b <i>bar-</i>	'go'
t <i>taba</i>	t <i>taba</i>	t <i>taba</i>	'reindeer'
d <i>dogor</i>	d <i>dɔgɔr</i>	d <i>dogor</i>	'friend'
k <i>kutujak</i>	k <i>kutujak</i>	k <i>kutuyak</i>	'lemming; mouse'
g <i>gini</i>	g <i>gini</i>	g <i>gini</i>	's/he'
č <i>če:lke</i>	tʃ̥ <i>tʃ̥e:lke</i>	č̥ <i>č̥elke</i>	'white'
d' <i>d'on</i>	ʃ̥ <i>ʃ̥on</i>	ʃ̥ <i>ʃ̥on</i>	'people'
s <i>üs</i>	s <i>ys</i>	s <i>üs</i>	'three'
h <i>hahil</i>	h <i>hahil</i>	h <i>hahil</i>	'fox'
l <i>leŋkej</i>	l <i>leŋkej</i>	l <i>leŋkey</i>	'snow owl'
r <i>ürek</i>	r <i>yrek</i>	r <i>ürek</i>	'river'
m <i>munnu</i>	m <i>munnu</i>	m <i>munnu</i>	'nose'
n <i>manna</i>	n <i>manna</i>	n <i>manna</i>	'here'
n' <i>in'e</i>	ɲ̥ <i>ɲ̥e</i>	ń̥ <i>in̥e</i>	'mother'
ŋ̊ <i>üŋ-</i>	ŋ̊ <i>yŋ-</i>	ŋ̊ <i>üŋ-</i>	'complain'
j <i>tojon</i>	j <i>tɔjɔn</i>	y <i>toyon</i>	'lord'

1.6.3 *Glossing Conventions*

The grammar at hand follows the Leipzig Glossing Rules (2015) to a large extent, nevertheless, with some language-specific adaptations. Since the used glosses are listed in the preface of this book, only some frequent and important peculiarities are mentioned here.

Generally, the glossing aims at being as transparent as possible, indicating as many grammatical functions as possible. The two frequent exceptions are the zero-marked singular number and nominative case, which are not indicated in glossing if not immediately relevant for the discussion at hand. A dot within a gloss signals the culmination of two or more meanings indicated by one single morpheme, e.g. 'IMP.2PL' for the second-person plural imperative mood form. The separating dot is also used for indicating possessive suffixes, e.g. 'POSS.1SG', as well as personal pronouns, e.g. '2PL.PRO'. A slash indicates alternative glosses, e.g. 'DAT/LOC' for the dative-locative case or 'RECP/COOP' for a derivational suffix indicating reciprocity or cooperation. The dative-locative case is always glossed with 'DAT/LOC', whereas in the case of some derivational suffixes, only the relevant gloss is given, e.g. *üŋ-s-üögüŋ* 'complain-COOP-IMP.1PL' = 'let us complain together' (SaSS_1964_NganasanBraveBoy_flk.080). The latter is applied to facilitate reading the glosses and save space in the case of long glosses. Epenthetic vowels are, as a rule, not marked in glossing but included in the given suffix. However, there is one exception: The instrumental case suffix -nAn, attached to consonant stems, calls for a high epenthetic vowel -I, e.g. *balig-i-nan* 'fish-EP-INS'. Given the counterpart -nnAn, used with vowel stems, it would be highly misleading to include the epenthetic vowel in the suffix in glossing.

Dolgan exhibits a clutch of auxiliary verbs (see Section 3.5.4), whereby many of them are grammaticalized from lexical verbs in specific contexts, e.g. *ka:l-* 'stay'. If the grammaticalized reading is intended, the gloss, e.g. 'stay.AUX' is given to account for both the lexical origin of the verb and its auxiliary function in the given context. The same principle applies to placeholder items (see Sections 3.5.5 and 10.4): The placeholder *kim*, thus, is referred to by the gloss 'who.PH' since it is originally an interrogative pronoun. As Dolgan undergoes much contact with Russian, Russian elements may occur in the cited examples. If these elements are spontaneous code-switches or carry Russian morphology, the gloss 'R' is added to the relevant item, e.g. *v_ashnavnom* 'basically.R' and *mosti-lar-bitin* 'bridge.PL.R-PL-POSS.1PL.ACC'.

Phonology and Phonetics

2.1 Vowel System

Dolgan exhibits a vowel system that is typical for Turkic languages. There are eight distinct vowels, which can be discriminated against each other by the parameters [\pm palatal/front], [\pm high/closed] and [\pm labial/rounded]. All vowels can be long and short, whereby vowel length is phonemic. Finally, Dolgan exhibits four opening diphthongs that consist of one high/closed and one low/open vowel.

CHART 6 Vowel system

monophthongs				
	palatal		velar	
	labial	illabial	labial	illabial
high/closed	<i>ü, ü:</i>	<i>i, i:</i>	<i>u, u:</i>	<i>ɨ, ɨ:</i>
low/open	<i>ö, ö:</i>	<i>e, e:</i>	<i>o, o:</i>	<i>a, a:</i>
diphthongs				
	<i>iü</i>	<i>iē</i>	<i>uö</i>	<i>ɨä</i>

The phoneme status of the short vowels is undisputed, and minimal pairs can be established without any problems.

at 'horse' vs *it* 'dog'
ok 'arrow' vs *uk*- 'put; stick'
em 'medicine' vs *im* 'dawn'
ör 'long' vs *ür*- 'bark'

The same applies to the long high vowels, as shown by the following minimal pairs.

üt- 'push' vs *üt:t* 'opening; hole'
it- 'move' vs *it:t*- 'feed; nourish'
kus 'duck' vs *kus:s*- 'embrace'
it 'dog' vs *it:t*- 'send; release'

The long low vowels are more complex in this regard: Whereas *a:* is clearly a phoneme, cf. *bar-* ‘go’ vs *ba:r* ‘there is; there exists’, occurring regularly and frequently, the occurrence of *e:*, *o:* and *ö:* is limited to suffixes, loanwords and contracted stems. This circumstance is due to the diphthongization of Pre-Dolgan-Sakha **e:*, **o:* and **ö:* (see below). *e:*, *o:* and *ö:* often occur in suffixes as allophones of the underspecified phoneme A: (see Section 2.5.1), e.g. in the verbalizing suffix -A: (Stachowski 1997: 69), cf. *ihille-* ‘listen’ (< *ihilin-* ‘be heard’), *končoto:-* ‘bury sth.’ (< *končot-* ‘stick in’), *örö:-* ‘spend’ (< *ör* ‘long’). Since vowel harmony governs the vowel quality here, one can hardly speak of phonemes. Besides that, there are certain loanwords in which these vowels occur, e.g. *eme:ksin* ‘old woman’ (< Mongolic *emegsin* ‘female’) (Stachowski 1993a: 45), *če:lke:* ‘white’ (< Ewenki *čalkə* ‘id.’) (Stachowski 1993a: 74), *oldo:n* ‘hook for hanging up the kettle’ (< Ewenki *oldon* ~ *ollon* ~ *ollo:n* ‘id.’) (Stachowski 1993a: 191), *Ölö:nö* ‘Elena’ (< Russian ‘Elena’). Finally, *e:* occurs at least in two contracted lexemes, the first being *ke:s-* ‘throw’ (< *kebis-* ‘id.’), the second being *e:t*, an evidential particle that has developed from the verb form *e-bit* ‘be-PST2.3SG’. Since *e:t* can be opposed to *et* ‘meat’, there is a minimal pair, and *e:* should be regarded as a phoneme. For *o:* and *ö:*, no minimal pairs can be found. Thus, they cannot be counted as phonemes from a strictly structuralist point of view. Due to their frequent occurrence, they are nevertheless to be regarded as elements of the Dolgan vowel system.

The status of the diphthongs in the Dolgan vowel system—*îâ*, *îê*, *ûô*, *ûö*—calls for some explanatory comments. First of all, they are proper diphthongs, and neither vowel sequences nor combinations of a semivowel (glide) and a full vowel. The former can be proven by the fact that they are always tautosyllabic; that is, a syllable boundary must not separate the two components included. Furthermore, they behave like high vowels concerning vowel harmony, not like low vowels, e.g. *ûôl-ga* ‘boy-DAT/LOC’ and *u-ga* ‘water-DAT/LOC’ vs *ogonn’or-go* ‘old.man-DAT/LOC’ (see Section 2.5.1 for details). If *ûô* were a heterosyllabic vowel sequence, the form **ûôl-go* would be expected since *o* would determine the vocalism of following syllables. Neither can the diphthongs be accounted for as combinations of a semivowel (glide) and a full vowel since semivowels rather function as syllable boundaries than as nuclei (Ladefoged & Maddieson 1996: 322). Words like *tîâ* ‘(forest) tundra’ or *bîêr-* ‘give’, however, show easily that this cannot be the case in Dolgan—a syllabification of the type **b.îer* would violate many phonotactic rules of Dolgan (see Section 2.3). From an acoustic-phonetic point of view, it can be added that the first element of diphthongs appears to be slightly longer than the second element, cf. Ubrjatova et al. (1982: 45–49) for the similar pattern in Sakha.

Finally, the Dolgan diphthongs exhibit some additional features worth mentioning. The diphthongs *îê*, *ûô* and *ûö* can result from the diphthongization

of Pre-Dolgan-Sakha **e*, **o*, and **ö*, respectively (Stachowski 1993b: 69, 81, 90).

Dolgan *bîēr*- 'give' < **be:r-*, cf. Turkish *ver-*, Tatar *bîr*- 'id.' (Stachowski 1993a: 59)

Dolgan *bûōl*- 'be; become' < **bo:l-*, cf. Turkish *ol-*, Tatar *bul*- 'id.' (Stachowski 1993a: 66)

Dolgan *kûōl* 'lake' < **kö:l*, cf. Turkish *göl*, Tatar *kül* 'id.' (Stachowski 1993a: 175)

Additionally, all four Dolgan diphthongs can result from contraction processes, as displayed in the following examples.

Dolgan *îēk*- 'bend' < **egik*- < **eg-*, cf. Turkmen *eg*- 'id.' (Stachowski 1993a: 122)

Dolgan *ûōl* 'boy; son' < **ogul*, cf. Turkish *oğul*, Turkmen *ogul* 'id.' (Stachowski 1993a: 243–244)

Dolgan *ûōr*- 'be happy' < **ögir-*, cf. East Old Turkic *ögir*- 'id.' (Stachowski 1993a: 251)

Dolgan *bîâr* 'liver; stomach' < **bagir*, cf. Turkish *bağır* 'breast', Tatar *bavir* 'liver' (Stachowski 1993a: 69)

As regards the phoneme status of the diphthongs, *îâ* is the most transparent case since it can be contrasted to both long and short monophthongs: *bîâr* 'liver' vs *ba:r* 'there is; there exists' vs *bar-* 'go'. In the case of *îē*, *ûō*, and *ûō̄*, no minimal pairs with the corresponding long monophthongs can be established in stems. In suffixes, however, relevant minimal pairs can be found when, e.g. contrasting the imperative second-person plural form -(I)ŋ to the respective short future second-person singular form -IA-ŋ (see Sections 6.5.9 and 6.4.3, respectively). In the former case, the stem-final long monophthong of applicable verbs is kept, whereas in the latter case, the future tense marker -IA replaces the stem-final long monophthong. Consequently, only the opposition of a long monophthong versus a diphthong distinguishes the two forms.

ita:ŋ 'cry-IMP.2PL' vs *it-îâ-ŋ* 'cry-FUT-2SG'

belemnē:ŋ 'prepare-IMP.2PL' vs *belemn-îē-ŋ* 'prepare-FUT-2SG'

oro:ŋ 'pull.out-IMP.2PL' vs *or-ûō-ŋ* 'pull.out-FUT-2SG'

öjdö:ŋ 'remember-IMP.2PL' vs *öjd-ûō̄-ŋ* 'remember-FUT-2SG'

Additionally, clear minimal pairs with the corresponding short monophthongs can be established, e.g. *tîēr-* ‘turn the inside out’ vs *ter-* ‘order’, *ûōl* ‘boy; son’ vs *ol* ‘that’, *ûōr* ‘herd’ vs *ör* ‘long’. Consequently, all four diphthongs of Dolgan bear phoneme status proven by minimal pairs, although *îē*, *ûō*, and *ûō* admittedly are often found in positions, where *e*, *o*, *ö* cannot occur due to the diphthongization process mentioned above.

As for the phonetics of Dolgan vowels, only a few comments are in order. The high vowel /i/ varies in its realization between [i] and [u]. The low/open vowels /o/, /ö/ and /e/ are mostly realized as mid-open [ɔ], [œ] and [ɛ], seldom as mid-closed [o], [ø] and [e]. Phonemically long vowels are also phonetically clearly longer than their short counterparts. In several contexts, e.g. emphasis and direct address, vowels can be phonetically prolonged; this, however, will not be marked systematically within this grammar. Example (2) shows the occurrence of a prolonged vowel (marked with <::> here).

- (2) *Kem-ten kem-ŋe hiraj-in ka:r-ga batari*
 time-ABL time-DAT/LOC face-POSS.3SG.ACC snow-DAT/LOC into
ann'-an bara:n ö::r hit-ar.
 push-CVB.SEQ after long lie-PRS.3SG
 ‘From time to time, he drops his face into the snow and is lying for a very long time.’
 (AsKS_19XX_Amulet_nar.011)

The phonetic realization of diphthongs may vary in natural Dolgan speech, and they can be realized as long monophthongs. In this case, the long monophthong corresponds to the first component of the given diphthong: /ûō/ is realized as [ü:], /îē/ as [i:], /ûō/ as [u:] and /îä/ as [i:].

ü:güle:- instead of *ûōgüle:-* ‘shout’
lörü: instead of *lörûō* ‘butterfly’
dî:- instead of *dîē-* ‘say’
du: instead of *dûō* ‘question particle’
bî: instead of *bîä* ‘string’
îrî: instead of *îrîä* ‘song’

This seemingly free variation occurs in the accusative and instrumental case forms of the interrogative pronoun *tûōk* ‘what’: *tugu* ~ *tu:gu* ~ *tûōgu* ‘what.ACC’ and *tugunan* ~ *tu:gunan* ~ *tûōgunan* ‘what.INS’ (see Section 5.2.4 for the inflection of interrogative pronouns) as well. Besides that, the verbal diphthong stems *dîē-* ‘say’ and *hîē-* ‘eat’ are frequently realized as *dî:-* and *hî:-*, respectively,

before the postterminal past participle -BIT (see Section 6.3.1.3). As can be seen in all examples, the described phenomenon tends to be restricted to lexical stems, and it does not occur, e.g. in future tense forms like *öl-üö-m* ‘die-FUT-1SG’ (vs **öl-ü:-m* ‘id.’). Coming back to the discussion above, this feature shows again that the diphthongs are not combinations of a semivowel (glide) and a full vowel. Otherwise, one would have to analyze the resulting long monophthong as the reflex of the semivowel, whereas the full vowel would get lost completely.

Finally, diphthongs in cardinal numerals correspond to short monophthongs in the respective ordinal numeral (*tüört* ‘four’ vs *tördüs* ‘fourth’, *bîes* ‘five’ vs *behis* ‘fifth’ and *uön* ‘ten’ vs *onus* ‘tenth’). The formation of ordinal numerals is explained in more detail in Section 3.4.2.

2.2 Consonant System

The consonant system of Dolgan, displayed in Chart 7, contains 17 short consonants and is, thus, moderately small according to Maddieson’s (2013a) typology. Compared to other Turkic languages, the lack of uvulars and the small number of affricates and fricatives is striking. Though the consonant system may appear quite simple, many details are rather complicated, especially related to the phoneme status of the plosives and the fricatives.

CHART 7 Consonant system

	Labial	Coronal	Postalveolar	Palatal	Velar	Glottal
Plosive	<i>p, b</i>	<i>t, d</i>		<i>d'</i>	<i>k, g</i>	
Nasal	<i>m</i>	<i>n</i>		<i>n'</i>	<i>ŋ</i>	
Affricate			<i>č</i>			
Fricative		<i>s</i>				<i>h</i>
Vibrant		<i>r</i>				
Lateral		<i>l</i>				
Approximant				<i>j</i>		

The voice parameter is only relevant regarding the plosives, whereby the voiceless and voiced plosives are partly complementarily distributed, cf. also Section 2.5.2. The same complementary distribution applies to the fricatives *s* and *h*.

The labial plosives *p* and *b* show the following patterns: Word- and syllable-initially both *p* and *b* occur. Intervocally only *b* occurs, whilst word- and syllable-finally only *p* occurs. Since word-initial **p-* has diachronically a weak position (Anderson 1998: 11; Johanson 2021: 355), there are remarkably fewer words with initial *p* than with initial *b*, the former being exclusively loanwords and onomatopoetic words, e.g. *purga*: ‘snowstorm’ < Russian *purga* ‘id.’ and *pulban* ‘ide’ < Ewenki *pulwane* ‘id.’ (Stachowski 1993a: 206; Boldyrev 2000b: 496). Nevertheless, at least one stable minimal pair can be established, namely *pa:s* ‘deadfall trap’ (< Russian *past* ‘id.’) vs *ba:s* ‘wound’. Thus, both *p* and *b* are to be analyzed as phonemes.

The coronal plosives *t* and *d* behave the way that word- and syllable-initially as well as intervocally both *t* and *d* occur, whilst word- and syllable-finally only *t* appears. Both are clearly phonemes, cf. the minimal pair *otu*: ‘campfire’ vs *odu*: ‘miracle; strange’ (Stachowski 1993a: 188, 197).

The velar plosives *k* and *g* are distributed like the labial plosives, i.e. word- and syllable-initially both *k* and *g* occur, intervocally—though not without exceptions—*g* occurs, whilst word- and syllable-finally only *k* occurs. At least one stable minimal pair can be established: *haka* ‘Dolgan’ vs *haga* ‘big as’. Consequently, also *k* and *g* are to be analyzed as phonemes. Moreover, word- and syllable-initial *k* is surely the diachronically “correct” reflex of Pre-Dolgan-Sakha **k*, cf. *kir-* ‘enter’ < **kir-* > Kirghiz *kir-* ‘id.’ (Johanson 2021: 373). Nevertheless, several very frequent stems begin with *g*, e.g. *gin-* ‘make’, *gini* ‘s/he’ or *gitta* ‘with’. At least the form *gin-* is unexpected concerning its initial consonant since relevant cognates exhibit initial *k-*, e.g. dialectal Tatar *kin-* ‘make’ (ESTYa VI 2000: 206–207). The initial *g* in *gini* and *gitta* (cf. the Sakha cognates *kini* and *kitta*) can neither be explained by regular diachronic processes. Finally, the velar plosives /k/ and /g/ may have the allophones [q] ~ [k^x] ~ [x] and [ɣ] ~ [ʁ], respectively. These allophones occur in the environment of open velar vowels:

huōk ‘not; NEG.EX’ → [huōk] ~ [huōq] ~ [huōk^x] ~ [huōx]
kara ‘black’ → [kara] ~ [qara] ~ [k^xara] (~ [xara])
ogo ‘child’ → [ogo] ~ [oɣo] ~ [oʁo]
aga ‘father’ → [aga] ~ [aɣa] ~ [aʁa]

The fricatives *s* and *h* are distributed as follows: *h* is restricted to word-initial and intervocalic positions, whereas *s* occurs in all other places. This complementary distribution, which is partly morphonological and partly diachronically motivated (see Section 2.5.2), suggests that *h* is an allophone of /s/. Nonetheless, given its frequent occurrence in many primary and underived lexemes

such as *huōl* ‘way; path’ and *hir* ‘country; soil; place’, it is an integral part of the Dolgan consonant system.

The phonemes /č/ and /d'/ can be analyzed as functional counterparts within the system since there is neither a voiced postalveolar affricate nor a voiceless palatal plosive. /č/ can vary in its realization from [tʃ] to [tɕ] and may even be realized as a plosive [tʃ] or [c]. /d'/, in turn, is usually realized as [j], but can also be affricated and realized as [dʒ] or [dʑ]. Idiolectally, also instances of lenition and realization as [j] can be observed.

če:lke ‘white’ → [tʃe:lke] ~ [tɕe:lke] ~ [tʲe:lke]
d'on ‘people’ → [jon] ~ [dʒon] ~ [dʑon] (~ [jon])

Long consonants usually do not occur in underived stems in Dolgan, frequent exceptions being the noun *n'u:čča* ‘Russian’, the verb *ekkire:-* ‘jump’, the adverb *töttörü* ‘back’, and the numerals *ikki* ‘two’ and *hette* ‘seven’. As can be seen in the examples, a digraph marks long consonants in this grammar. This is because long consonants mostly appear at morpheme boundaries, and the representation ⟨p:⟩ instead of ⟨pp⟩ would significantly complicate interlinear glossing. See also Section 1.6.2. Moreover, several relational nouns, e.g. *inni* ‘front part’, exhibit long consonants synchronically. These forms always have parallel forms, in this case, *ilin*, and the former variant has emerged via reanalysis of the third-person singular form, e.g. *inn-i* ‘front.part-POSS.3SG’ (see Section 3.1.3 as well as Stapert (2013: 176–188) for details). In contrast to underived stems, long consonants frequently occur at morpheme boundaries, resulting from the consonant assimilations described in Section 2.5.3. Thereby, the following consonants are concerned:

/p/: *ip-pit* ‘shoot-PTCP.PST’
 /t/: *et-te* ‘meat-PART’
 /k/: *ok-ko* ‘arrow-DAT/LOC’
 /č/: *maččit* ‘woodcutter’ < *mas* ‘wood’ + agent noun suffix -čIt
 /l/: *d'ollo:k* ‘happy’ < *d'ol* ‘luck’ + propriative suffix -LA:K
 /m/: *gim-mit* ‘make-PTCP.PST’
 /n/: *kün-ner* ‘day-PL’
 /ŋ/: *küŋ-ŋe* ‘day-DAT/LOC’

As for the phonemic status of consonant length, for all listed consonants but /p/ and /č/, minimal pairs can be established (see list below). In the case of /p/, this is expectable since it is voiced in an intervocalic position; in the case of /č/, it cannot finally be answered whether the absence of a minimal pair is

due to chance or due to structural constraints. Since intervocalic *č* is, however, attested, e.g. *hača* ‘guts’, the former explanation appears to be more likely.

et-te ‘meat-PART’ vs *e-t-e* ‘be-PST1-3SG’
čok-ko ‘coal-DAT/LOC’ vs *Čoko* ‘Choko (proper name)’
öl-l-ö ‘die-PST1-3SG’ vs *öl-ö* ‘die-CVB.SIM’
im-mit ‘dawn-POSS.1PL’ vs *imit* ‘soften.IMP.2SG’
anni ‘lower part’ vs *ani* ‘now’
muŋ-ŋa ‘misery-DAT/LOC’ vs *muŋ-a* ‘misery-POSS.3SG’

This means that out of the 17 short consonant phonemes displayed in Chart 7, six have phonemically long counterparts: /t/ vs /tt/, /k/ vs /kk/, /l/ vs /ll/, /m/ vs /mm/, /n/ vs /nn/ and /ŋ/ vs /ŋŋ/. Additionally, /p/ and /č/ have the long counterparts [pp] and [čč]. But in their case, no minimal pairs can be established, whence their phoneme status is questionable. All other consonants occur only as short consonants.

2.3 Phonotactics

2.3.1 Position and Combination of Phonemes

This section describes the possible positions of the described phonemes and their possibilities of combination. Long and short vowels, as well as diphthongs, can principally appear in all possible positions within a word form, i.e. word-initially, word-finally and between consonants. However, vowel sequences do not occur. Chart 8 to Chart 10 show instances of this.

The distribution of consonants is more complicated than the distribution of vowels and exhibits some constraints. In the word-initial position, *s*, *r*, *ŋ*, and *j* do not occur, except in very young Russian loanwords like *soldat* ‘soldier’ or *jabloko* ‘apple’. Other exceptional occurrences of word-initial *s* are due to Sakha interference, e.g. frequently observed in the transcript MiXS_1967_SoldierInSecondWorldWar_nar. *l*, *n* and *n'* do not occur word-initially in genuinely Turkic items, but in Mongolic or Ewenki loanwords. In the word-final position, no voiced plosives occur, neither *č*, *h*, or *n'*. Intervocally—due to intervocalic voicing and debuccalization (see Section 2.5.2)—no *p*, *s*, and seldom *k* occur. In syllable-final and pre-consonantal positions, the same constraints hold as in the word-final position. Exceptionally, *b*, *g* and *č* can appear in this position, but only in Ewenki loanwords and due to assimilation processes, respectively. As for Ewenki loanwords, *tibde* ‘lynx’ and *bugdi* ‘spotted’ are cases in point. In the syllable-initial, post-consonantal position, no *h*, *r* and *j* occur.

CHART 8 Positions of short vowels in a word form

#_	_#	C_C
<i>a</i> <i>at</i> 'horse'	<i>taba</i> 'reindeer'	<i>bar</i> 'go.IMP.2SG'
<i>e</i> <i>et</i> 'meat'	<i>kîehe</i> 'evening'	<i>kel</i> 'come.IMP.2SG'
<i>o</i> <i>ot</i> 'grass'	<i>togo</i> 'why'	<i>d'ol</i> 'luck'
<i>ö</i> <i>öl</i> 'die.IMP.2SG'	<i>börö</i> 'wolf'	<i>ölör</i> 'kill.IMP.2SG'
<i>i</i> <i>it</i> 'dog'	<i>tali</i> 'similar'	<i>d'il</i> 'year'
<i>i</i> <i>is</i> 'drink.IMP.2SG'	<i>gini</i> 's/he'	<i>tik</i> 'sew.IMP.2SG'
<i>u</i> <i>uk</i> 'stick.IMP.2SG'	<i>bu</i> 'this'	<i>tur</i> 'stand.IMP.2SG'
<i>ü</i> <i>üs</i> 'three'	<i>ühü</i> 'they say'	<i>tüs</i> 'fall.IMP.2SG'

CHART 9 Positions of long vowels in a word form

#_	_#	C_C
<i>a:</i> <i>a:s</i> 'pass.by.IMP.2SG'	<i>ha:</i> 'bow'	<i>ba:r</i> 'there is'
<i>e:</i> <i>e:t</i> 'EVID'	<i>emte:</i> 'heal.IMP.2SG'	<i>eme:ksin</i> 'old woman'
<i>o:</i> <i>o:nn'u:</i> 'game'	<i>o:nn'ò:</i> 'play.IMP.2SG'	<i>d'ollo:k</i> 'happy'
<i>ö:</i> -- ^a	<i>tölö:</i> 'pay.IMP.2SG'	<i>öjdö:k</i> 'clever'
<i>î:</i> <i>î:t</i> 'send.IMP.2SG'	<i>îari:</i> 'pain; illness'	<i>tî:n</i> 'breath'
<i>î:</i> <i>î:t</i> 'feed.IMP.2SG'	<i>îli:</i> 'hand'	<i>bî:r</i> 'one'
<i>u:</i> <i>u:s</i> 'master'	<i>odu:</i> 'miracle'	<i>tu:s</i> 'salt'
<i>ü:</i> <i>ü:n</i> 'grow.IMP.2SG'	<i>ölü:</i> 'death'	<i>hü:r</i> 'run.IMP.2SG'

- a The absence of word-initial *ö:* in the data is not a phonotactic constraint, but due to the overall low frequency of *ö:* in stems, which in turn is a result of the diphthongization process **ö:* > *üö*.

CHART 10 Positions of diphthongs in a word form

#_	_#	C_C
<i>îâ</i> <i>îâl</i> 'neighbour'	<i>îriâ</i> 'song'	<i>bîar</i> 'liver; stomach'
<i>îê</i> <i>îêk</i> 'bend.IMP.2SG'	<i>dîê</i> 'say.IMP.2SG'	<i>bîês</i> 'five'
<i>uô</i> <i>uôl</i> 'boy; son'	<i>buruô</i> 'smoke'	<i>tûok</i> 'what'
<i>üô</i> <i>üôr</i> 'herd; swarm'	<i>lörüô</i> 'butterfly'	<i>tûört</i> 'four'

CHART 11 Positions of consonants in a word form

# _	_ #	V_V	_ C	C _
<i>p</i> <i>pa:s</i> 'deadfall'	<i>kap</i> 'catch.IMP.2SG'	--	<i>huptu</i> 'through'	<i>kirpala:</i> 'cut.IMP.2SG'
<i>b</i> <i>ba:s</i> 'wound'	--	<i>taba</i> 'reindeer'	(<i>tibde</i> 'lynx')	<i>elbek</i> 'many'
<i>t</i> <i>tur</i> 'stand.IMP.2SG'	<i>ot</i> 'grass'	<i>atak</i> 'foot; leg'	<i>töttörü</i> 'back'	<i>d'aktar</i> 'woman'
<i>d</i> <i>dīē</i> 'say.IMP.2SG'	--	<i>ide</i> 'habit'	--	<i>ürdük</i> 'high'
<i>d'</i> <i>d'īē</i> 'tent; house'	--	<i>ed'ij</i> 'elder sister'	--	<i>kird'agas</i> 'old'
<i>k</i> <i>ka:r</i> 'snow'	<i>tik</i> 'sew.IMP.2SG'	<i>haka</i> 'Dolgan'	<i>a:кта:</i> 'read.IMP.2SG'	<i>oloŋko</i> 'tale'
<i>g</i> <i>gini</i> 's/he'	--	<i>aga</i> 'father'	(<i>bugdi</i> 'spotted')	<i>kergen</i> 'family'
<i>č</i> <i>čiča:k</i> 'small bird'	--	<i>hača</i> 'guts'	<i>oččogo</i> 'then'	<i>bulčut</i> 'hunter'
<i>s</i> --	<i>bu:s</i> 'ice'	--	<i>üstün</i> 'through'	<i>harsin</i> 'tomorrow'
<i>h</i> <i>haka</i> 'Dolgan'	--	<i>ehe</i> 'grandfather'	--	--
<i>r</i> --	<i>ur</i> 'lay.IMP.2SG'	<i>börö</i> 'wolf'	<i>kördö:</i> 'search.IMP.2SG'	--
<i>l</i> <i>lörüō</i> 'butterfly'	<i>öl</i> 'die.IMP.2SG'	<i>ölör</i> 'kill.IMP.2SG'	<i>elbek</i> 'many'	<i>öllö</i> 'die.PST1.3SG'
<i>m</i> <i>manna</i> 'here'	<i>em</i> 'medicine'	<i>timir</i> 'iron'	<i>emne:</i> 'heal.IMP.2SG'	<i>ajmak</i> 'relative'
<i>n</i> <i>nöŋüō</i> 'next'	<i>uōn</i> 'ten'	<i>hana:</i> 'think.IMP.2SG'	<i>onton</i> 'then'	<i>ilimne:</i> 'fish.IMP.2SG'
<i>n'</i> <i>n'ima</i> 'slyness'	--	<i>in'e</i> 'mother'	--	<i>ogonn'or</i> 'old man' ^a
<i>ŋ</i> --	<i>kiēŋ</i> 'broad'	<i>haŋa</i> 'word'	<i>köŋdöj</i> 'hollow'	<i>a:ŋŋa</i> 'door.DAT/LOC'
<i>j</i> --	<i>ij</i> 'moon'	<i>kaja</i> 'mountain'	<i>öjdö:</i> 'remember.IMP.2SG'	---

a Often, *n* + *n'* is assimilated and pronounced as long *n'*, i.e. [ogon:or] instead of [ogonjor].

2.3.2 Syllable and Word Structure

The syllable and, consequently, the word structure of Dolgan is reasonably restrictive, as it is typical for Turkic languages. Since syllable and word structure are tightly intertwined in Dolgan, they are discussed here together. The most complex possible syllable in Dolgan has the structure CVCC ~ CV:CC ~

CHART 12 Possible syllable structure in
 monosyllabic words

Syllable structure	Example
V:	<i>u:</i> ‘water’
CV	<i>bu</i> ‘this’
CV:	<i>tü:</i> ‘hair (of animals)’
CV̆V	<i>tîä</i> ‘(forest) tundra’
CVC	<i>mas</i> ‘wood; forest’
CV:C	<i>ba:r</i> ‘there is’
CV̆VC	<i>bîes</i> ‘five’
VC	<i>ol</i> ‘that’
V:C	<i>a:t</i> ‘name’
V̆VC	<i>ûöl</i> ‘boy; son’
VCC	<i>ert</i> ‘row.IMP.2SG’
V:CC	<i>i:rt</i> ‘tempt.IMP.2SG’
V̆VCC	<i>ûört</i> ‘make.happy.IMP.2SG’
CVCC	<i>bert</i> ‘very’
CV:CC	<i>ki:rt</i> ‘hawk’
CV̆VCC	<i>tüört</i> ‘four’

CV̆VCC, which is moderately complex according to Maddieson’s (2013b) typology. The nucleus of a syllable is without exception vocalic, and there are no syllabic consonants in Dolgan. Consequently, Dolgan syllables always contain a vowel, around which the syllable is organized. Since short and long vowels and diphthongs behave similarly, in what follows, the term “vowel” covers all three. The vocalic nucleus can be preceded by one consonant in the onset position and followed by maximally two consonants in the coda position. As for the emerging combinatory possibilities, mono- and polysyllabic words exhibit different patterns. Therefore, the structure of monosyllabic words is described separately from the structure of polysyllabic words and the syllables included in them.

Monosyllabic words consisting only of a nucleus are seldom in Dolgan, an inherited constraint from Proto-Turkic. The only exceptions are the lexemes *i:* ‘felly; hoop’, *u:*₁ ‘water’ and *u:*₂ ‘sleep’. These seemingly contradictory examples can be explained diachronically: In *u:*₁ ‘water’ < **sub* (Stachowski 1993b: 50), word-initial **s* has been lost, and in all three lexemes, the long vowels are the results of a contraction process, cf. *i:* ‘felly; hoop’ < **eg(i)*- ‘bow; bend’ (Stachow-

ski 1993b: 61) and w_2 ‘sleep’ < **ug(u)* (Stachowski 1993b: 124). Historically, the syllable onset was thus not empty, and the words were not monosyllabic, respectively.

Consequently, either the onset or the coda of the only syllable or both are usually filled. If the onset is filled, it consists of exactly one consonant, word-initial consonant clusters being prohibited. This constraint applies to most Russian loanwords as well, so that the Dolgan equivalent of monosyllabic Russian *chleb* ‘bread’ is the disyllabic form *hi.liēp* ~ *ki.liēp* ‘id.’. In the speech of fully bilingual speakers, however, young loanwords may appear with word-initial consonant clusters as well, but this is obviously due to Russian interference, a case in point being *klass* ‘class; grade’. If the coda is filled, it consists mostly of exactly one consonant; additionally, two consonant clusters may appear, namely *rt* and *lt*, e.g. *tūört* ‘four’ and *bult* ‘haul’. Chart 12 summarizes the possible syllable structures in monosyllabic words.

In polysyllabic words, syllables consisting only of a nucleus—i.e. with empty onset and coda—occur exclusively word-initially. This is because Dolgan phonotactics do not permit vowel hiatus, and intervocalic consonants syllabify with the vowel following them, e.g. *ta.ba* ‘reindeer’ (and not **tab.a*). Therefore, word-internally and word-finally, a syllable’s onset must not be empty.

The onset of a syllable—when not exceptionally empty as shown before—consists of exactly one consonant in Dolgan, be the syllable word-initial, word-internal or word-final. Consonant clusters are strictly prohibited in this position in inherited words, and only young Russian loanwords in the speech of fully bilingual speakers may form an exception. Even in such instances, many variations and a tendency towards inserting a prothetic vowel can be observed, e.g. *oskuōla* ~ *uskuōla* ~ *škuōla* ‘school’ (< Russian *škola* ‘id.’).

The coda of a syllable can be empty or filled, the former yielding open syllables, the latter yielding closed syllables. Both patterns occur in all positions within a word. If the coda is filled, it often consists of exactly one consonant. Still, in word-final position, one consonant cluster may also appear, namely *rt*, e.g. in double causatives such as *ih-er-t* ‘drink-CAUS-CAUS.IMP.2SG’ = ‘make s.b. to give s.b. to drink’. Word-internally, however, the second consonant of the cluster gets lost from the syllable coda. If a syllable with empty onset is added, *t* “moves” to the following syllable and is voiced (see Section 2.5.2), e.g. *i.her.der* ‘makes s.b. to give s.b. to drink’ (< *ihert-* + -Ar ‘PRS.3SG’). If a syllable with filled onset is added, *t* is deleted (see Section 2.5.5), e.g. *i.her.pet* ‘does not make s.b. to give s.b. to drink’ (< *ihert-* + -BAT ‘NEG.PRS.3SG’).

Chart 13 sums up the possible syllable structures in polysyllabic words in Dolgan. Since long consonants do not differ phonotactically from consonant sequences, both are analyzed as not further specified combinations of two consonants here.

CHART 13 Possible syllable structure in polysyllabic words

Syllable structure	Example		
	Word-initial	Word-internal	Word-final
V	<i>e.tim</i> 'I was' (< e- 'be')	---	---
V:	<i>a:.tim</i> 'my name' (< a:t 'name')	---	---
V̂V	<i>ûo.lum</i> 'my son' (< ûol 'boy; son')	---	---
CV	<i>ta.ba</i> 'reindeer'	<i>ku.tu.jak</i> 'mouse'	<i>bö.rö</i> 'wolf'
CV:	<i>hü:.tük</i> 'thimble'	<i>ik.te:.ne</i> 'three-year old male reindeer'	<i>ko.ju:</i> 'viscous'
CV̂V	<i>kûo.ka</i> 'pike'	<i>bi.hîe.ne</i> 'our'	<i>bu.rûo</i> 'smoke'
CVC	<i>het.te</i> 'seven'	<i>ka.bir.ga</i> 'throat'	<i>a.gis</i> 'eight'
CV:C	<i>kü:s.te:k</i> 'strong'	<i>kü:s.te:k.tik</i> 'strong (adv.)'	<i>aj.da:n</i> 'noise'
CV̂VC	<i>tî̂al.la:k</i> 'windy'	<i>o.ŋûok.ta:k</i> 'bony'	<i>kaj.dî̂ek</i> 'whereto'
VC	<i>al.ta</i> 'six'	---	---
V:C	<i>aj.da:n</i> 'noise'	---	---
V̂VC	<i>î̂al.d'it</i> 'guest'	---	---
VCC	---	---	---
CVCC	---	---	<i>i.hert</i> 'drink.CAUS.IMP.2SG'
CV:CC	---	---	<i>ka.ra:rt</i> 'black (adv.)'
CV̂VCC	---	---	<i>hi.mîert</i> 'death' <i>tu.rûort</i> 'place.CAUS.IMP.2SG'

The discussion above shows that most underived stems in Dolgan are mono- or disyllabic, e.g. *mas* 'wood' and *haka* 'Dolgan', respectively. Additionally, there are some underived trisyllabic stems, e.g. *kutujak* 'mouse; lemming' or *kabirga* 'throat'. However, when inflectional and derivational suffixes are added to a stem, the emerging word form may contain many more syllables. An extreme case in point is the word form *küre-t-el-ette:bit-ter* 'escape-CAUS-ITER-MULT-PST2-3PL' = 'they made them frequently escape',¹ being syllabified into seven syllables, cf. *kü.re.te.let.te:bit.ter*.

1 Attested in MaPX_KuNS_200X_YakutsOfEssej_conv.MaPX.010.

2.4 Prosody

The prosody of Dolgan is a largely uninvestigated field of research. In what follows, two aspects will be touched upon: First, the lexical accent, i.e. position and characteristics of “stress” within a word, and second, the sentence accent, i.e. intonation patterns of whole sentences. However, it has to be stated that the analysis is rather rough, and only the most apparent tendencies can be shown. The prosodic features of Dolgan definitely call for further research.

2.4.1 Lexical Accent

Lexical accent or *stress* describes which syllable within a word form is highlighted intonationally. Corresponding acoustic parameters, which are not mutually exclusive, can be “[...] increased loudness and/or duration, greater force and/or precision of articulation, and pitch movement and/or widened pitch range” (Ladd 2001: 1381). According to Artem’ev (2013a: 53), longer duration and higher intensity of the vowel of the accented syllable as well as “tonal contrasts” lead to the intonational prominence of a syllable in Dolgan. From my point of view, high pitch accent appears to be the decisive factor in this respect. In the word *taba* ‘reindeer’, the last syllable is unambiguously stressed. Without going into much detail, no prominent distinction in the length of *a* in the first and second syllables can be detected.

Regarding loudness/intensity and pitch accent, Figure 4 and Figure 5 display the relevant intonation patterns of one male and one female speaker. Loudness/intensity (unit: decibel) is marked with green colour, and the fundamental frequency (unit: hertz) is marked with blue colour. Whereas the green curves exhibit two plateaus each, with a slight trough at the syllable boundary, the blue curves exhibit an evident rise after the syllable boundary. Thus, the accented syllable correlates with an increase in the fundamental frequency, i.e. high pitch.²

The same pattern can be observed when the accusative case suffix *-(n)I* is added to the word, yielding the word form *tabani*. The lexical accent moves to the word-final syllable corresponding to the accusative case suffix (see below). Once more, it can be observed that the green curve displaying loudness/intensity is relatively constant. In contrast, the blue curve shows a rise towards the end of the word form (clearer in the case of the female speaker AkEE (Figure 7) than in the case of the male speaker KiMN (Figure 6)).

2 The figures displaying intonation contours have been created with the software Praat (<https://www.fon.hum.uva.nl/praat/>, last access: 01.03.2022).

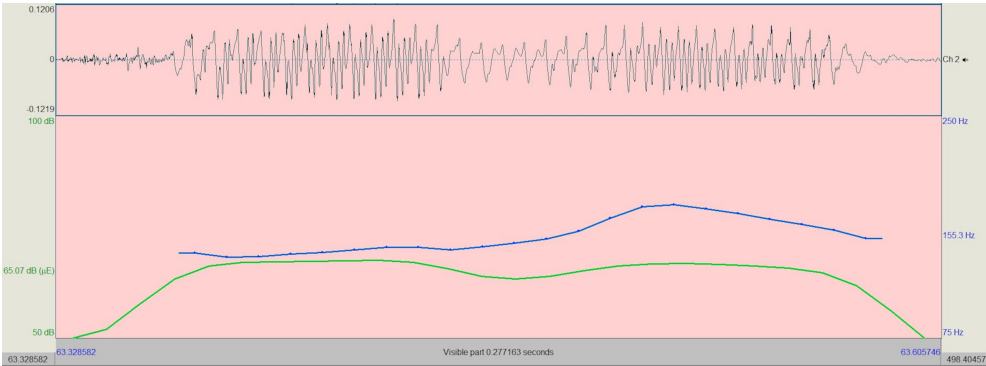


FIGURE 4 Intonation of *taba* ‘reindeer’ (speaker (male): KiMN)

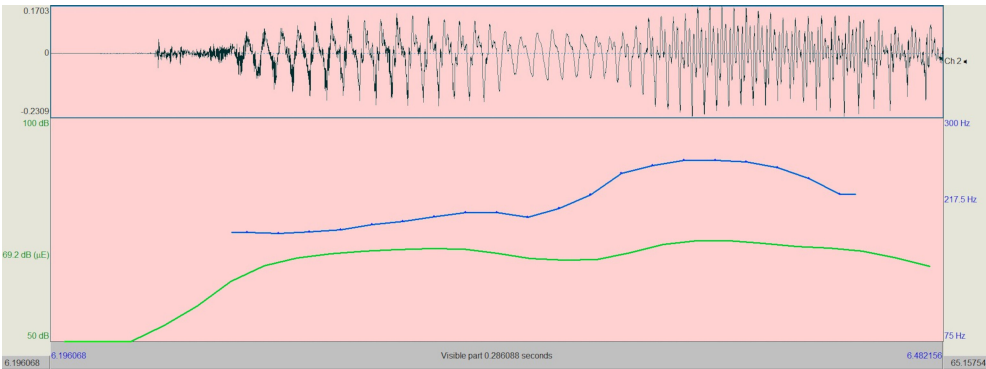


FIGURE 5 Intonation of *taba* ‘reindeer’ (speaker (female): AkEE)

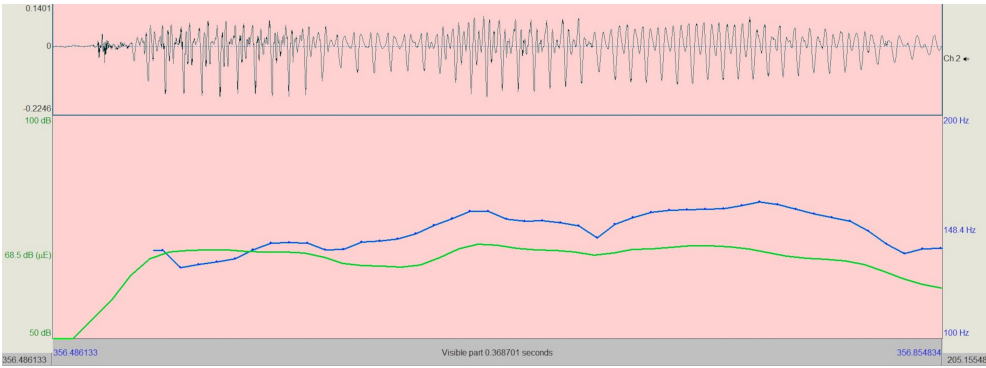


FIGURE 6 Intonation of *taba-ni* ‘reindeer-ACC’ (speaker (male): KiMN)

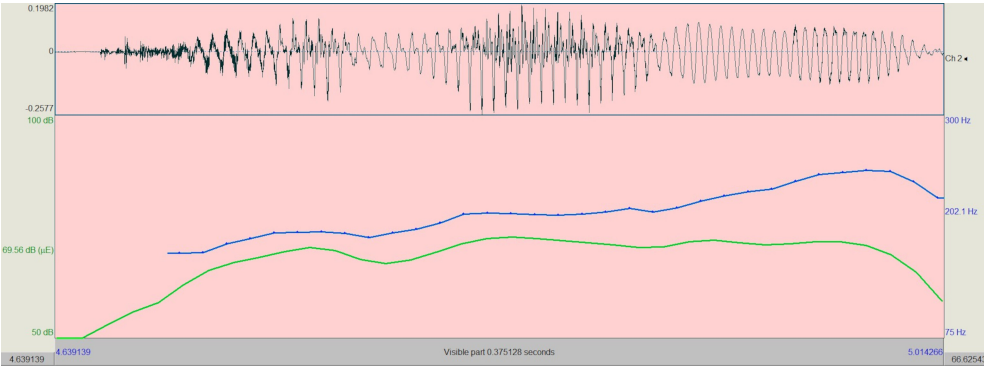


FIGURE 7 Intonation of *taba-ni* 'reindeer-ACC' (speaker (female): AkEE)

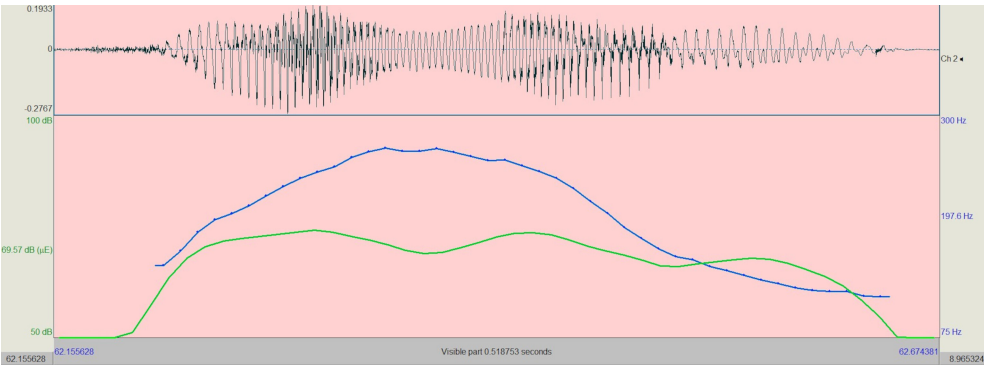


FIGURE 8 Intonation of *h-onon* 'EMPH-then' (speaker (female): AkEE)

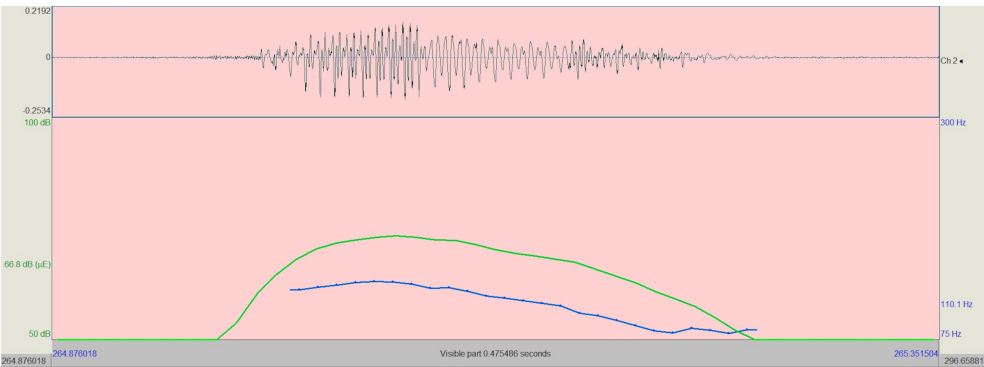


FIGURE 9 Intonation of *h-onon* 'EMPH-then' (speaker (male): KiMN)

If not the final syllable of a word form is accented (see below for relevant instances), both the fundamental frequency and intensity appear to decrease after the accented syllable. In the word form *h-onon* 'EMPH-then', the first syllable is accented since the emphatic prefix *h-* calls for this pattern. In Figure 8 and Figure 9, the blue curve displaying fundamental frequency exhibits a rise on the accented syllable and an apparent fall after the syllable boundary. As for the green curve indicating intensity/loudness, this pattern is not that evident in Figure 8 but obvious in Figure 9. Hence, both pitch and intensity/loudness play a role in highlighting a syllable intonationally in Dolgan, whereby pitch, however, appears to be more salient. Finally, it has to be said that the shown analyses may be insofar misleading, as they show accent patterns within a discourse. Therefore, sentence accent and alike (Section 2.4.2) may also play an interfering role, which underlines even more that further, experimentally founded research would be desirable.

The tentative investigation into the acoustic correlates of lexical accent in Dolgan already implies that the latter tends to be realized on the last syllable of a word form. However, this is not without exceptions. In what follows, I will describe the most important tendencies and patterns regarding the position of the lexical accent within a word form. First, I will deal with bare stems, and afterwards, I will deal with suffixed word forms.

In bare stems, the lexical accent falls, as a rule, on the last syllable of the stem. In the case of nouns, the bare stem is homonymous with the nominative singular (see Section 4.2.1). In the case of verbs, the bare stem is homonymous with the imperative form of the second person singular (see Section 6.5.9). Therefore, these forms are taken here as instances of bare stems in the following list. The acute accent marks high pitch (rising fundamental frequency) here and thus indicates the accented syllable.

nominals:

át 'horse'

tabá 'reindeer'

atín 'other; different'

agís 'eight'

togús 'nine'

kutuják 'mouse; lemming'

tula;ják 'orphan'

verbs:

bár 'go'

egél 'get; bring'

kepsé: 'tell'

ogús ‘beat’
tagís ‘go out’
ihillé ‘listen’

As can be seen from the list, the last syllable of a bare nominal or verbal stem is, per default, accented, regardless of either word and syllable structure or long vowels in non-final syllables. Coming to adjectives, pronouns and adverbs, there are, however, some exceptions from this pattern. When the emphatic prefix *h-* is attached to a demonstrative pro-form or adverb, the lexical accent falls on the word’s first syllable.

húbu ‘exactly this’ (< *bú* ‘this’)
hónno ‘exactly here’ (< *onnó* ‘there’)
hónon ‘exactly like that’ (< *onón* ‘like that’)

The same holds for adjectives exhibiting emphatic reduplication of the first syllable (see Section 12.1.4). In this case, the reduplicated syllable of the adjective is accented. If there are two syllables reduplicated, then the second one is accented.

káp-karaŋa ‘very dark; pitch-black’ (< *karaŋá* ‘dark’)
húoč-hogotok ‘very lonely’ (< *hogotók* ‘lonely’)
tobús-toloru ‘very full’ (< *tolorú* ‘full’)

Moreover, there are a handful of demonstrative adverbs and one further adverb, which are amalgamations of initially two words. The demonstrative adverbs *bugurduk* ‘like this’, *itigirdik* ‘like this there’ and *ogurduk* ‘like that’ arose from combining the respective demonstrative pronoun and the postposition *kördük* ‘like’. Therefore, the lexical accent is realized as follows: *búgurduk*, *itígirdik* and *ógurduk*. The adverb *harsîerde* ~ *harsîerde* ~ *harsîerde* ‘in the morning’ has its lexical accent on the second syllable since the word is a contracted form from *harsin erde* ‘tomorrow early’. Finally, Russian loanwords (see Section 11.2.1.3) may preserve their original accent pattern, e.g. *untájka* ‘fur boots’, *koruôba* ‘cow’ or *m’il’ís’ije* ‘police; policeman’.

When suffixes are added to a stem, the lexical accent is usually shifted to the attached suffix. If more than one suffix is attached, the syllable corresponding to the last suffix of the word form is accented. This can be illustrated by the following accent patterns of *ogo* ‘child’ and *bar-* ‘go’.

ogó 'child'
ogo-lór 'child-PL'
ogo-lor-bút 'child-PL-POSS.1PL'
ogo-lor-butu-gár 'child-PL-POSS.1PL-DAT/LOC'

bár 'go'
bar-ár 'go-PRS.3SG'
bar-d-á 'go-PST1-3SG'
bar-di-bít 'go-PST1-1PL'
bar-dag-iná 'go-COND/TEMP-3SG'
bar-dak-pitíná 'go-COND/TEMP-1PL'

However, there are two instances where this pattern does not act consistently. First, these are the suffixes from the predicative ending set (see Section 6.2), attached to nominals, forming predicate nominals, and verbs in several tense-aspect-mood forms. Especially in the former function as well as in the affirmative present tense paradigm, variation concerning the accent pattern can be observed like in the following examples.

kihi-bín 'human-1SG' ~ *kihí-bin* 'human-1SG'
küččügüj-gün 'small-2SG' ~ *küččügúj-gün* 'small-2SG'

bar-a-bín 'go-PRS-1SG' ~ *bar-á-bin* 'go-PRS-1SG'
toŋ-o-gún 'freeze-PRS-2SG' ~ *toŋ-ó-gun* 'freeze-PRS-2SG'

No motivation for the variation could be observed based on the analyzed material. At least, dialectal or idiolectal variation does not seem to play a role since the same speaker may use both variants. In this context, it has to be mentioned that the lexical accent may disambiguate homonymous word forms, namely the plural forms of nouns (see Section 4.1.2) and the third-person plural predicate nominal forms (see Section 4.4). The former forms have their lexical accent realized on the plural suffix -LAr, whereas in the case of the latter forms, the lexical accent tends to be realized on the last syllable of the stem, cf. *ogo-lór* 'child-PL' = 'children' vs *ogo-lor* 'child-3PL' = 'they are children'.

Second, also the postterminal past participle suffix -BIT may be unaccented. As described in Section 6.4.2, the given suffix forms two past tense paradigms, which differ only in the personal endings attached to the tense suffix. In the third person singular of the postterminal non-evidential past, the suffix -(t)A is added. In contrast, there is a zero suffix in the third person singular of the postterminal evidential past (see Sections 6.4.2.2 and 6.4.2.3). In the former

case, the person-number suffix is always accented (*kel-bit-é* ‘come-PST2-3SG’), but in the latter case, either the past tense suffix or the last syllable of the stem can be accented, yielding the variants *kel-bít* ‘come-PST2.3SG’ ~ *kél-bit* ‘come-PST2.3SG’.

Both types of variation call for further research since no description of Dolgan describes them adequately, nor does the grammar at hand. From a broader turcological perspective, the first type of variation is undoubtedly not surprising since unaccented predicate nominal suffixes are common in the language family (Johanson 2021: 782). However, the second type of variation would be a peculiar feature of Dolgan, which may be an additional means to disambiguate both named past tenses.

2.4.2 Sentence Accent

Sentence accent describes which constituent within a sentence is intonationally highlighted. In contrast to lexical accent, its linguistic expression in Dolgan has not been studied at all. More generally, sentence accent is tightly interwoven with the illocution and the information structure of a sentence. In what follows, some tentative observations on this complex are presented.

As for interrogative clauses, both content and polar questions seem to exhibit particular intonation patterns. In polar questions (see Section 8.4.2.1), the interrogative particle *duō* ~ *du:* corresponds to high pitch and a fall of the fundamental frequency. Figure 10 displays the intonation of example (3), the blue curve (fundamental frequency, unit: hertz) exhibiting a peak at the syllable, which corresponds to the interrogative particle.

- (3) *Bier-bit-tere du:*, [...]?
 give-PST2-3PL Q
 ‘Did they give [you to him for marrying], [or at your own request]?’
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.016)

In content questions (see Section 8.4.2.2), both the accented syllable of the interrogative pronoun and, if present, the interrogative clitic =(I)j correspond to high pitch and a fall of the fundamental frequency. Figure 11 shows the intonation of the clause in example (4). The peaks of the blue curve (fundamental frequency, unit: hertz) correspond to the second syllable of *kantan* and the interrogative clitic =ij, respectively.

- (4) [...] *kantan bul-uō-η=ij ani?*
 from.where find-FUT-2SG=Q now
 ‘[It has changed], where can you find it now?’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.203)

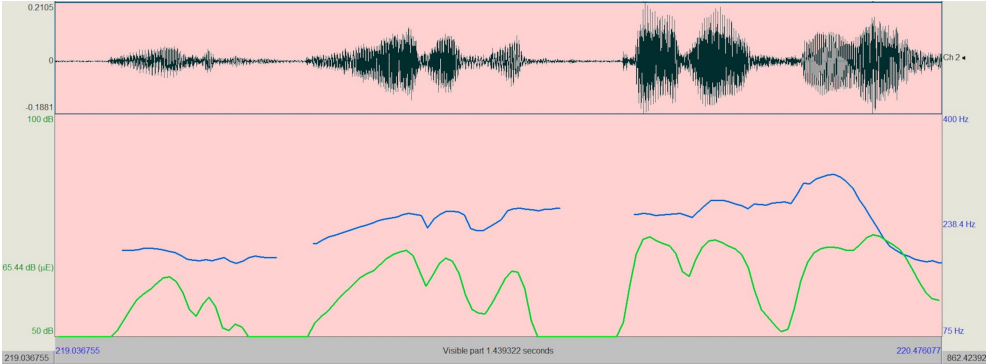


FIGURE 10 Intonation of polar question (speaker (female): KuNS)

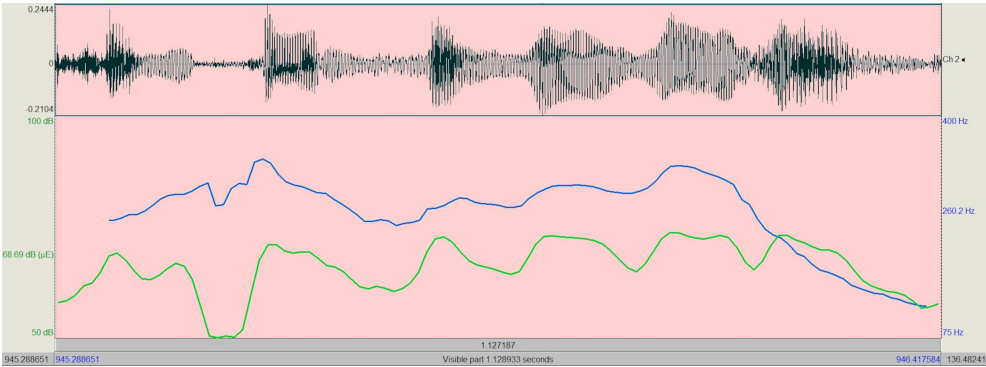


FIGURE 11 Intonation of content question (speaker (female): LaVN)

The intonational prominence of interrogative pronouns in interrogative clauses leads to the next relevant phenomenon connected with sentence accent, namely information structure. The interrogative pronoun corresponds to minimal (narrow) focus in interrogative clauses since the information asked for is most relevant for the speaker in the given context (see Section 10.2 for details). Since interrogative pronouns exhibit high pitch and a fall of the fundamental frequency, it can be expected that this applies to focused constituents in non-interrogative clauses, too. Indeed, Däbritz (2021a: 177–178) has suggested that Dolgan, among other languages of Northern Siberia, adheres to this pattern. Example (5) displays the reply to the question of what the speaker’s husband’s name was. Thus, the latter is the focused piece of information in both question and answer. Figure 12 shows convincingly that minimal focus corresponds to high pitch and a subsequent fall of the fundamental frequency: The clear-cut peak at the left of the blue curve corresponds to the

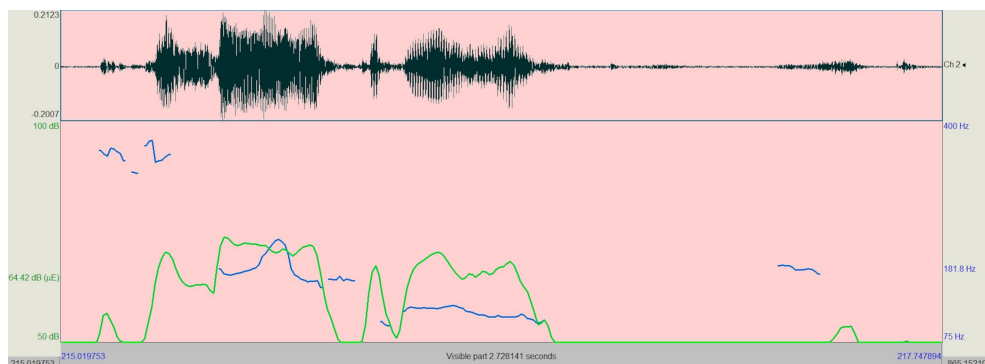


FIGURE 12 Minimal focus and pitch accent

proper name *Basi:laj*, whereas the rest of the clause is uttered with a significantly lower fundamental frequency.

- (5) [FOC *Basi:laj*] *e-t-e* *mîene er-im* *a:t-a*.
 Vasiliy be-PST1-3SG my husband-POSS.1SG name-POSS.3SG
 ‘My husband’s name was Vasiliy.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.052)

To sum this section up, the decisive acoustic parameter for both lexical and sentence accents appears to be pitch (fundamental frequency). Usually, the last syllable is accented within word forms, as described in Section 2.4.1. Within sentences, the constituent corresponding to (minimally) focused information is accented. Consequently, interrogative clauses have their accent realized on interrogative pronouns or interrogative particles. Acoustically, the sentence accent corresponds to high pitch and a subsequent fall of the fundamental frequency. It becomes clear from the observations presented above that lexical and sentence accents may easily conflict since they appear to be realized phonetically likewise. However, no conclusions can be drawn so far, to what extent these potential conflicts are relevant for Dolgan prosody at all.

2.5 Morphological Processes

2.5.1 Vowel Harmony

Dolgan—like all Turkic languages—exhibits a vowel harmony. The vowel harmony is progressive, i.e. preceding syllables determine the vocalism of the following syllables. Moreover, vowel harmony is active in both stems and suffixes.

As stated in Section 2.1, the Dolgan vowel system can be described with the three parameters [\pm palatal/front], [\pm labial/rounded] and [\pm high/closed]. The former two parameters play a role in vowel harmony so that the Dolgan vowel harmony is both palatal-velar and labial-illabial. The vowels *a* and *ɪ* are velar-illabial, *o* and *u* are velar-labial, *e* and *i* are palatal-illabial, and *ö* and *ü* are palatal-labial.

Palatal-velar vowel harmony acts consistently. Thus, either velar or palatal vowels can occur in a word. The only though a frequent exception is *hars̄ērda* ‘morning; tomorrow’, which is a lexicalization of *hars̄in* ‘tomorrow’ + *erde* ‘early’. Labial-illabial vowel harmony acts consistently in the case of low labial vowels, but not in the case of high labial vowels: After syllables with *u* or *ü*, the high labial vowels *u* and *ü*, respectively, occur if a high vowel is needed. Nevertheless, suppose a low vowel is required. In this case, the illabial vowels *a* and *e* occur, not their labial counterparts *o* and *ö*, as expected, e.g. *u:-ga* ‘water-DAT/LOC’ and *küŋ-ŋe* ‘sun-DAT/LOC’ instead of **u:go* and **küŋŋö*, respectively.

The diphthongs participate in vowel harmony as well, whereby *iâ* is velar-illabial, *uô* is velar-labial, *iê* is palatal-illabial, and *üö̂* is palatal-labial. The first component of the given diphthong appears to determine, among other things, the parameter [\pm high/closed] of the syllable nucleus in which it occurs (see Sezer & Wetzels 1986 for a similar analysis of Sakha diphthongs). The behaviour of the labial diphthongs can prove this: *uô* behaves like *u*, and not like *o*, cf. *uôs-tar* ‘lip-PL’ and *u:-lar* ‘water-PL’ vs *ok-tor* ‘arrow-PL’; *üö̂* behaves like *ü*, and not like *ö*, cf. *üör-der* ‘herd-PL’ and *üŋü:-ler* ‘spear-PL’ vs *börö-lör* ‘wolf-PL’. Consequently, after *uô* and *üö̂*—like in the case of *u* and *ü*—the high labial vowels *u* and *ü*, but the low illabial vowels *a* and *e* do occur. It could be stipulated that the relatively longer realization of the first component of the diphthong (see Section 2.1) is the reason for this pattern. Still, additional acoustic and articulatory phonetic studies would be needed to prove this. Finally, the vowel harmony patterns of words containing diphthongs again underline the proper diphthong status of *iâ*, *iê*, *uô* and *üö̂*, since otherwise it could hardly be explained, why the second component of diphthongs is “ignored” by vowel harmony.

Consequently, suffixes that contain a vocalic element automatically exhibit at least four allomorphs.³ Suffixes are either high-vocalic, with the possible allophones *i*, *ɪ*, *u* and *ü*, or low-vocalic, with the possible allophones *a*, *e*, *o* and *ö*. The first row is represented in turcological tradition with the underspecified

3 The number of allomorphs can be much higher due to additional consonant assimilations, cf. the next section(s).

CHART 14 Vowel harmony

Lexeme	Plural	Accusative	POSS.3SG + Dative-Locative
<i>taba</i> 'reindeer'	<i>tabalar</i>	<i>tabani</i>	<i>tabatigar</i>
<i>ogo</i> 'children'	<i>ogolor</i>	<i>ogonu</i>	<i>ogotugar</i>
<i>ebe</i> 'grandmother'	<i>ebeler</i>	<i>ebeni</i>	<i>ebetiger</i>
<i>börö</i> 'wolf'	<i>börölör</i>	<i>börönü</i>	<i>börötüger</i>
<i>iriā</i> 'song'	<i>iriālar</i>	<i>iriāni</i>	<i>iriātigar</i>
<i>u:</i> 'water'	<i>u:lar</i>	<i>u:nu</i>	<i>utugar</i>
<i>kihi</i> 'human'	<i>kihiler</i>	<i>kihini</i>	<i>kihitiger</i>
<i>ünjü:</i> 'spear'	<i>ünjü:ler</i>	<i>ünjü:nü</i>	<i>ünjü:tüger</i>

phoneme I, the second row with the underspecified phoneme A (Johanson & Csató 1998: xx–xxi). Hence, the underspecified form of the accusative case suffix -(n)I has i.a. the allomorphs *-ni*, *-ni*, *-nu* and *-nü*, whereas the underspecified form of the plural morpheme -LAr has i.a. the allomorphs *-lar*, *-ler*, *-lor* and *-lör*. Chart 14 shows examples of vowel harmony; the underspecified morphemes are -LAr (plural), -(n)I (accusative) and -(t)I-gAr (dative-locative, third person singular).

2.5.2 Lenition: Voicing of Plosives and the Debuccalization *s > h*

An essential morphonological process in Dolgan is lenition, i.e. making a consonant more sonorous (Lavoie 2001: 5, 16). The first related process is the voicing of voiceless plosives. If the syllable-final plosives *p* and *k* get into an intervocalic position, they are voiced to *b* and *g*. Hence, the change *p, k > b, g / V_V* occurs. Interestingly, the intervocalic voicing process is not active in the case of the voiceless coronal plosive *t*, which remains *t* also in intervocalic positions.

hap 'thread' + -(n)I 'ACC' → *habi*
hap 'cover; close' + -Ar 'PTCP.PRS' → *habar*
ha:k 'faeces' + -(n)I 'ACC' → *ha:gi*
tik 'sew' + -Ar 'PTCP.PRS' → *tiger*
at 'horse' + -(n)I 'ACC' → *ati*
it 'shoot' + -Ar 'PTCP.PRS' → *itar*

In turn, *t* within the consonant clusters *rt* and *lt* is voiced when suffixes are attached since the clusters are syllabified into two syllables then.

*hur*t '(temporary) camp' + -(n)I 'ACC' → *hurdu*
ihert- 'make to give to drink' + -Ar 'PTCP.PRS' → *iherder*
bult 'haul' + -(n)I 'ACC' → *buldu*

The change $s > h$ / V_V is similar to intervocalic voicing, though certainly not an instance of voicing since the outcome *h* is still voiceless. Instead, it is a debuccalization process also subsumed under lenition since the glottal fricative *h* is more sonorous than the coronal fricative *s* (Lavoie 2001: 16–18, 27).

as 'food' + -(n)I 'ACC' → *ahi*
is- 'drink' + -Ar 'PTCP.PRS' → *ihēr*

Given its relevance for comparative and areal investigations, a couple of further comments are necessary. Phonetically, the intervocalic debuccalization of *s* is undoubtedly the same process as the change of word-initial **s*- > *h*- described in Section 1.5.2. However, the former morphologically conditioned process is active in Sakha as well, whereas the latter is a salient feature distinguishing Dolgan from Sakha. Additionally, Northern Ewenki dialects exhibit the debuccalization $s > h$ in the same phonetic environments as Dolgan (Miščenkova 2019: 72). Therefore, it is not far to seek that all Dolgan, Sakha and Northern Ewenki exhibit the same process but to a varying degree (see also Pakendorf 2008). Finally, the same development occurs independently also in Bashkir, cf. Bashkir *jaha*- 'make' vs its Tatar cognate *jasā*- 'id.' (Johanson 2021: 391).

2.5.3 Consonant Assimilations

Due to changes in the syllable structure of a word, some consonant assimilations at morpheme boundaries do occur. These consonant assimilations concern both the place and the manner of articulation as well as voice. Hence, underspecified phonemes can be assumed for the respective groups of consonants. In turcological tradition, the labials *p*, *b* and *m* are represented by B, the coronals *t*, *d*, *n* and *l* are represented by T or L (depending on the background of the suffix), and the velars *k*, *g* and *ŋ* are represented by G (Johanson & Csátó 1998: xxi–xxii).

There are both progressive and regressive consonant assimilations in Dolgan. Progressive assimilations concern labial, coronal and velar consonants, whereas regressive assimilations concern only coronal consonants. As for the position of the consonants in the word, progressive assimilations concern suffix-initial consonants and regressive assimilations concern stem- and suffix-final consonants. If both assimilation directions occur together, progressive

assimilation is first, and regressive assimilation is second. In what follows, some examples of consonant assimilations are given.

– Examples for progressive assimilations (suffix-initial consonants):

In the case of labials, *b* occurs after vowels and voiced non-nasal consonants, *p* occurs after voiceless consonants, and *m* occurs after nasal consonants, cf. the first-person plural possessive suffix -BI_t.

Environment	Example
-bIt / V_	<i>taba-bit</i> 'reindeer-POSS.1PL'
-bIt / C _{+voice -nas} –	<i>til-bit</i> 'language-POSS.1PL'
-pIt / C _{-voice} –	<i>ti:s-pit</i> 'tooth-POSS.1PL'
-mIt / C _{+nas} –	<i>etiŋ-mit</i> 'thunder-POSS.1PL'

In the case of coronals, the suffix onset can be *l* or *t* when attached to vowel stems. This variation is not predictable but depends on the etymological background of the suffix, cf. *taba-lar* 'reindeer-PL' vs *taba-ta* 'reindeer-PART'. In the case of consonant stems, *l* occurs after voiced lateral consonants, *d* occurs after voiced non-nasal non-lateral consonants, *t* occurs after voiceless consonants, and *n* occurs after nasal consonants. The plural marker -LAr is a case in point.

Environment	Example
-lAr / V_	<i>taba-lar</i> 'reindeer-PL'
-tA / V_	<i>taba-ta</i> 'reindeer-PART'
-lAr / C _{+voice +lat} –	<i>til-lar</i> 'language-PL'
-dAr / C _{+voice -nas -lat} –	<i>har-dar</i> 'rough.legged.buzzard-PL'
-tAr / C _{-voice} –	<i>ti:s-ter</i> 'tooth-PL'
-nAr / C _{+nas} –	<i>etiŋ-ner</i> 'thunder-PL'

In the case of velars, *g* occurs after vowels and voiced non-nasal consonants, *k* occurs after voiceless consonants, and *ŋ* occurs after nasal consonants. The dative-locative case suffix -GA serves as an example.

Environment	Example
-gA / V_	<i>taba-ga</i> 'reindeer-DAT/LOC'
-gA / C _{+voice -nas} –	<i>til-ga</i> 'language-DAT/LOC'
-kA / C _{-voice} –	<i>ti:s-ke</i> 'tooth-DAT/LOC'
-ŋA / C _{+nas} –	<i>etiŋ-ŋe</i> 'thunder-DAT/LOC'

The suffix -ČIt forming agent nouns shows a unique pattern of progressive assimilation. Concerning the suffix-initial consonant, -ČIt has the variants -čIt,

-d'It, -sIt and -hIt. The distribution of the variants is not entirely regular, and idiolectal variation may occur. Some rules, however, can be detected: The variant -hIt stands exclusively after vowels. The variants -čIt and -sIt stand after voiceless consonants, whereby the former seems to be more frequent there, but -čIt can also occur after voiced consonants. The variant -d'It, finally, stands exclusively after voiced consonants.

Environment	Example
-hIt / V _	<i>taba-hit</i> 'reindeer-AGN' = 'reindeer herder'
-čIt / C _{-voice} _	<i>balik-čit</i> 'fish-AGN' = 'fisherman'
-sIt / C _{-voice} _	<i>ölör-ûök-süt</i> 'kill-PTCP.FUT-AGN' = 'murderer'
-čIt / C _{+voice} _	<i>em-čit</i> 'medicine-AGN' = 'doctor'
-d'It / C _{+voice} _	<i>ča:j-d'it</i> 'tea-AGN' = 'person serving tea'

Finally, this rare type of assimilation is often lexicalized since the suffix -čIt is a derivational suffix. Thus, the derived words may appear with the one or the other variant, e.g. the forms *balikčit* 'fisherman' vs *ölörûöksüt* 'murderer', which exhibit the same phonological environment, but a different allomorph. Chart 15 summarizes the discussed progressive assimilation processes, inspired by a similar presentation in Jastremskij's (1900) grammar of Sakha but adapted to Dolgan. As expected, some cells referring to stem-final *t*, *č* and *n* are empty due to the regressive assimilations discussed below. Moreover, stem-final *č* occurs exclusively before the agent noun suffix -čIt, and goes back to *s* in the lexicon form, e.g. *maččit* 'woodcutter' < *mas* 'tree; wood' + -čIt (see below).

– Examples for regressive assimilations (stem- und suffix-final consonants):
The coronal *t* turns into the labial *p* before labial consonants and the velar *k* before velar consonants.

Process	Example
<i>t</i> > <i>p</i> / _C _{+lab}	<i>at</i> 'horse' + -BIIt → <i>ap-pit</i> 'horse-POSS.1PL'
<i>t</i> > <i>k</i> / _C _{+vel}	<i>at</i> 'horse' + -GA → <i>ak-ka</i> 'horse-DAT/LOC'

The coronal *n* turns into the labial *m* before labial consonants and the velar *ŋ* before velar consonants.

Process	Example
<i>n</i> > <i>m</i> / _C _{+lab}	<i>a:n</i> 'door' + -BIIt → <i>a:m-mit</i> 'door-POSS.1PL'
<i>n</i> > <i>ŋ</i> / _C _{+vel}	<i>a:n</i> 'door' + -GA → <i>a:ŋ-ŋa</i> 'door-DAT/LOC'

When the agent noun suffix -čIt is added to a stem ending with *s*, the latter is often assimilated to *č*. However, this is not mandatory, cf. parallel forms such as *as-čit* ~ *ač-čit* ‘food-AGN’ = ‘cook’.

CHART 15 Summary of progressive consonant assimilations

Stem-final sound	Suffix-initial consonant				
	B	T	L	G	Č
Vowel	<i>b</i>	<i>t</i>	<i>l</i>	<i>g</i>	<i>h</i>
<i>p</i>	<i>p</i>	<i>t</i>	<i>t</i>	<i>k</i>	<i>č</i> ~ <i>s</i>
<i>t</i>	-	<i>t</i>	<i>t</i>	-	<i>č</i> ~ <i>s</i>
<i>k</i>	<i>p</i>	<i>t</i>	<i>t</i>	<i>k</i>	<i>č</i> ~ <i>s</i>
<i>s</i>	<i>p</i>	<i>t</i>	<i>t</i>	<i>k</i>	<i>č</i>
<i>č</i>	-	-	-	-	<i>č</i>
<i>r</i>	<i>b</i>	<i>d</i>	<i>d</i>	<i>g</i>	<i>č</i> ~ <i>d'</i>
<i>l</i>	<i>b</i>	<i>l</i>	<i>l</i>	<i>g</i>	<i>č</i> ~ <i>d'</i>
<i>m</i>	<i>m</i>	<i>n</i>	<i>n</i>	<i>ŋ</i>	<i>č</i> ~ <i>d'</i>
<i>n</i>	-	<i>n</i>	<i>n</i>	-	<i>č</i> ~ <i>d'</i>
<i>ŋ</i>	<i>m</i>	<i>n</i>	<i>n</i>	<i>ŋ</i>	<i>č</i> ~ <i>d'</i>
<i>j</i>	<i>b</i>	<i>d</i>	<i>d</i>	<i>g</i>	<i>č</i> ~ <i>d'</i>

2.5.4 *Vowel Syncope and Metathesis*

Disyllabic stems of the structure (C)VCVC- and a few similar polysyllabic stems may be unstable if the stem-final syllable contains a high vowel (*i*, *u*, *i* or *ü*). This phenomenon is called *middle syllable loss* or *Mittelsilbenschwund* in turcological tradition and is shared within the whole Turkic language family (Menges 1995: 106; Johanson 1998a: 31–32; Johanson 2021: 293–294). As a rule, only stems ending with a coronal (mainly *t*, *n*, *s* or *l*) are concerned, but a stem-final coronal is not a sufficient condition for the emergence of syncope and metathesis. In other words: Vowel syncope and metathesis are not entirely predictable but are idiosyncratic properties of a given lexical stem. Vowel syncope applies in relevant stems whenever a vowel-initial suffix is attached. Metathesis, in turn, applies when a consonant-initial suffix is attached. However, this is not obligatory and subject to much variation so that no stable rules can be established, cf. the concurring postterminal past participle (suffix -BIT) forms of *tohut*-‘break’: *tohup-put* without metathesis vs *tostu-but* with metathesis. Because of

CHART 16 Vowel syncope and metathesis in nominal stems

Stem/Meaning	Syncope	Metathesis	Inflected Forms
<i>agis</i> 'eight'	<i>aks-</i> ~ (<i>ags-</i>)	---	<i>aks-is</i> 'eight-ORD'
<i>alin</i> 'lower part'	<i>ann-</i>	<i>anni-</i>	<i>ann-im</i> 'lower.part-POSS.1SG' <i>anni-lari-gar</i> 'lower.part-POSS.3PL-DAT/LOC'
<i>arit</i> 'space between'	<i>ard-</i>	<i>ardi-</i>	<i>ard-im</i> 'space.between-POSS.1SG' <i>ardi-lari-gar</i> 'space.between-POSS.3PL-DAT/LOC'
<i>balis</i> 'younger sibling'	<i>balt-</i>	<i>balti-</i>	<i>balt-im</i> 'younger.sibling-POSS.1SG' <i>balti-lara</i> 'younger.sibling-POSS.3PL'
<i>ilin</i> 'front part'	<i>inn-</i>	<i>inni-</i>	<i>inn-im</i> 'front.part-POSS.1SG' <i>inni-leri-ger</i> 'front.part-POSS.3PL-DAT/LOC'
<i>kelin</i> 'back part'	<i>kenn-</i>	<i>kenni-</i>	<i>kenn-im</i> 'back.part-POSS.1SG' <i>kenni-leri-ger</i> 'back.part-POSS.3PL-DAT/LOC'
<i>kilin</i> 'father-in-law'	<i>kinn-</i>	<i>kinni-</i>	<i>kinn-im</i> 'father.in.law-POSS.1SG' <i>kinni-lara</i> 'father.in.law-POSS.3PL'
<i>kiris</i> 'bow string'	<i>kirs-</i>	<i>kirsi-</i>	<i>kirs-im</i> 'bow.string-POSS.1SG' <i>kirsi-ler</i> 'bow.string-POSS.3PL'
<i>kiris</i> 'surface'	<i>kirs-</i>	<i>kirsi-</i>	<i>kirs-im</i> 'surface-POSS.1SG' <i>kirsi-lari-gar</i> 'surface-POSS.3PL-DAT/LOC'
<i>kögüs</i> 'back'	<i>köks-</i>	<i>köksü-</i>	<i>köks-üm</i> 'back-POSS.1SG' <i>köksü-leri-ger</i> 'back-POSS.3PL-DAT/LOC'
<i>örüt</i> 'side'	<i>ött-</i>	<i>öttü-</i>	<i>ött-üm</i> 'side-POSS.1SG' <i>öttü-leri-ger</i> 'side-POSS.3SG-DAT/LOC'
<i>togus</i> 'nine'	<i>toks-</i>	---	<i>toks-us</i> 'nine-ORD'
<i>törüt</i> 'root'	<i>törd-</i>	<i>tördü-</i>	<i>törd-üm</i> 'root-POSS.1SG' <i>tördü-ler</i> 'root-POSS.3PL'
<i>ürüt</i> 'upper part'	<i>ürd-</i>	<i>ürdü-</i>	<i>ürd-üm</i> 'upper.part-POSS.1SG' <i>ürdü-leri-ger</i> 'upper.part-POSS.3PL-DAT/LOC'

the vowel syncope and the metathesis, consonant assimilations occur in the stem when two consonants come together at a syllable boundary. This assimilation may be voicing or devoicing, but also assimilation to the manner of articulation (see Section 2.5.3).

Apart from the phonetic criteria mentioned above, the occurrence of both vowel syncope and metathesis is partly predictable from semantic properties of the given lexical stem: As for nominals, primarily relational nouns are

CHART 17 Vowel syncope and metathesis in verbal stems

Stem/Meaning	Syncope	Metathesis	Inflected Forms
<i>agin-</i> ‘miss’	<i>akt-</i>	<i>akti-</i>	<i>akt-ar</i> ‘miss-PTCP.PRS’ <i>akti-bit</i> ‘miss-PTCP.PST’
<i>aragis-</i> ‘separate’	<i>araks-</i>	<i>araksi-</i>	<i>araks-ar</i> ‘separate-PTCP.PRS’ <i>araksi-bit</i> ‘separate-PTCP.PST’
<i>bilin-</i> ‘appear’	<i>bill-</i>	<i>billi-</i>	<i>bill-er</i> ‘appear-PTCP.PRS’ <i>billi-bit</i> ‘appear-PTCP.PST’
<i>d’ülün-</i> ‘understand’	<i>d’üll-</i>	<i>d’üllü-</i>	<i>d’üll-er</i> ‘understand-PTCP.PRS’ <i>d’üllü-büt</i> ‘understand-PTCP.PST’
<i>halin-</i> ‘fear’	<i>hall-</i>	<i>halli-</i>	<i>hall-ar</i> ‘fear-PTCP.PRS’ <i>halli-bit</i> ‘fear-PTCP.PST’
<i>hihin-</i> ‘stick; glue’	<i>hist-</i>	<i>histi-</i>	<i>hist-ar</i> ‘stick-PTCP.PRS’ <i>histi-bit</i> ‘stick-PTCP.PST’
<i>hirit-</i> ‘go; travel’	<i>hild-</i>	<i>hild’i-</i>	<i>hild-ar</i> ‘go-PTCP.PRS’ <i>hild’i-bit</i> ‘go-PTCP.PST’
<i>ilin-</i> ‘take away’	<i>ill-</i>	<i>illi-</i>	<i>ill-er</i> ‘take.away-PTCP.PRS’ <i>illi-bit</i> ‘take.away-PTCP.PST’
<i>igin-</i> ‘stumble’	<i>ign- ~ iyy-</i>	<i>igni- ~ iyyi-</i>	<i>ign-er ~ iyy-er</i> ‘stumble-PTCP.PRS’ <i>igni-bit ~ iyyi-bit</i> ‘stumble-PTCP.PST’
<i>îarij-</i> ‘be sick’	<i>îald’-</i>	<i>îald’i-</i>	<i>îald-ar</i> ‘be.sick-PTCP.PRS’ <i>îald’i-bit</i> ‘be.sick-PTCP.PST’
<i>itîn-</i> ‘climb’	<i>itt-</i>	<i>itti-</i>	<i>itt-ar</i> ‘climb-PTCP.PRS’ <i>itti-bit</i> ‘climb-PTCP.PST’
<i>kajit-</i> ‘tear’	<i>kajd-</i>	<i>kajdi-</i>	<i>kajd-ar</i> ‘tear-PTCP.PRS’ <i>kajdi-bit</i> ‘tear-PTCP.PST’
<i>kihalin-</i> ‘worry’	<i>kihall-</i>	<i>kihalli-</i>	<i>kihall-ar</i> ‘worry-PTCP.PRS’ <i>kihalli-bit</i> ‘worry-PTCP.PST’
<i>kirij-</i> ‘become old’	<i>kird’-</i>	<i>kird’i-</i>	<i>kird-ar</i> ‘become.old-PTCP.PRS’ <i>kird’i-bit</i> ‘become.old-PTCP.PST’
<i>kitin-</i> ‘unite’	<i>kitt-</i>	<i>kitti-</i>	<i>kitt-ar</i> ‘unite-PTCP.PRS’ <i>kitti-bit</i> ‘unite-PTCP.PST’
<i>körül-</i> ‘watch’	<i>köll- ~ köll’-</i>	<i>köllü- ~ köll’ü-</i>	<i>köll-ör ~ köll’-ör</i> ‘watch-PTCP.PRS’ <i>köllü-büt ~ köll’ü-büt</i> ‘watch-PTCP.PST’
<i>körös-</i> ‘meet’	<i>körs-</i>	<i>körsü-</i>	<i>körs-ör</i> ‘meet-PTCP.PRS’ <i>körsü-büt</i> ‘meet-PTCP.PST’
<i>meñehin-</i> ‘ride’	<i>meñest-</i>	<i>meñesti-</i>	<i>meñest-er</i> ‘ride-PTCP.PRS’ <i>meñesti-bit</i> ‘ride-PTCP.PST’

CHART 17 Vowel syncope and metathesis in verbal stems (*cont.*)

Stem/Meaning	Syncope	Metathesis	Inflected Forms
<i>ogus-</i> 'beat'	<i>oks-</i>	<i>oksu-</i>	<i>oks-or</i> 'beat-PTCP.PRS' <i>oksu-but</i> 'beat-PTCP.PST'
<i>ogut-</i> 'hunger'	<i>okt-</i>	<i>oktu-</i>	<i>okt-or</i> 'hunger-PTCP.PRS' <i>oktu-but</i> 'hunger-PTCP.PST'
<i>oɣohun-</i> 'make'	<i>oɣost-</i>	<i>oɣostu-</i>	<i>oɣost-or</i> 'make-PTCP.PRS' <i>oɣostu-but</i> 'make-PTCP.PST'
<i>otut-</i> 'heat'	<i>ott-</i>	<i>ottu-</i>	<i>ott-or</i> 'heat-PTCP.PRS' <i>ottu-but</i> 'heat-PTCP.PST'
<i>tagis-</i> 'go out'	<i>taks-</i>	<i>taksi-</i>	<i>taks-ar</i> 'go.out-PTCP.PRS' <i>taksi-bit</i> 'go.out-PTCP.PST'
<i>taɲin-</i> 'dress'	<i>taɲn- ~</i> <i>taɲɲ-</i>	<i>taɲni- ~</i> <i>taɲɲi-</i>	<i>taɲn-ar ~ taɲɲ-ar</i> 'dress-PTCP.PRS' <i>taɲni-bit ~ taɲɲi-bit</i> 'dress-PTCP.PST'
<i>tebis-</i> 'step over'	<i>teps-</i>	<i>tepsi-</i>	<i>teps-er</i> 'step.over-PTCP.PRS' <i>tepsi-bit</i> 'step.over-PTCP.PST'
<i>tehin-</i> 'drip'	<i>test-</i>	<i>testi-</i>	<i>test-er</i> 'drip-PTCP.PRS' <i>testi-bit</i> 'drip-PTCP.PST'
<i>tigis-</i> 'come close'	<i>tiks-</i>	<i>tiksi-</i>	<i>tiks-er</i> 'come.close-PTCP.PRS' <i>tiksi-bit</i> 'come.close-PTCP.PST'
<i>tilin-</i> 'revive'	<i>till-</i>	<i>tilli-</i>	<i>till-er</i> 'revive-PTCP.PRS' <i>tilli-bit</i> 'revive-PTCP.PST'
<i>tohun-</i> 'break (intr.)'	<i>tost-</i>	<i>tostu-</i>	<i>tost-or</i> 'break-PTCP.PRS' <i>tostu-but</i> 'break-PTCP.PST'
<i>tolun-</i> 'be embarrassed'	<i>toll-</i>	<i>tollu-</i>	<i>toll-or</i> 'be.embarrassed-PTCP.PRS' <i>tollu-but</i> 'be.embarrassed-PTCP.PST'
<i>tönün-</i> 'come back'	<i>tönn-</i>	<i>tönnü-</i>	<i>tönn-ör</i> 'come.back-PTCP.PRS' <i>tönnü-büt</i> 'come.back-PTCP.PST'
<i>tugus-</i> 'improve'	<i>tuks-</i>	<i>tuksu-</i>	<i>tuks-ar</i> 'improve-PTCP.PRS' <i>tuksu-but</i> 'improve-PTCP.PST'
<i>tuhun-</i> 'wrestle'	<i>tust-</i>	<i>tustu-</i>	<i>tust-ar</i> 'wrestle-PTCP.PRS' <i>tustu-but</i> 'wrestle-PTCP.PST'
<i>tutun-</i> 'catch'	<i>tutt-</i>	<i>tuttu-</i>	<i>tutt-ar</i> 'catch-PTCP.PRS' <i>tuttu-but</i> 'catch-PTCP.PST'
<i>ugun-</i> 'put in'	<i>ukt-</i>	<i>uktu-</i>	<i>ukt-ar</i> 'put.in-PTCP.PRS' <i>uktu-but</i> 'put.in-PTCP.PST'
<i>uhun-</i> 'flow'	<i>ust-</i>	<i>ustu-</i>	<i>ust-ar</i> 'flow-PTCP.PRS' <i>ustu-but</i> 'flow-PTCP.PST'

CHART 17 Vowel syncope and metathesis in verbal stems (*cont.*)

Stem/Meaning	Syncope	Metathesis	Inflected Forms
<i>umun-</i> ‘forget’	<i>umn-</i>	<i>umnu-</i>	<i>umn-ar</i> ‘forget-PTCP.PRS’ <i>umnu-but</i> ‘forget-PTCP.PST’
<i>umus-</i> ‘dive’	<i>ums-</i>	<i>umsu-</i>	<i>ums-ar</i> ‘dive-PTCP.PRS’ <i>umsu-but</i> ‘dive-PTCP.PST’

concerned (see Section 3.1.3), but also some common nouns denoting kinship and body parts, as well as the ordinal numerals *aksis* ‘eighth’ (< *agis*) and *toksus* ‘ninth’ (< *togus*). Chart 16 lists all nominal stems occurring in the INEL Dolgan Corpus, where vowel syncope and metathesis apply. The first column shows the underived stem, the second column shows the syncopated stem, the third column shows the metathesis, and the fourth column shows the stems in frequent morphological positions. Note that metathesis may also occur in positions where paradigmatically not expected. This is most frequent in third-person singular possessive forms, e.g. *kinni-ta* ‘father.in.law-POSS.3SG’ concurring with expected *kinn-a* ‘father.in.law-POSS.3SG’ (< *kilin* ‘father-in-law’). Thereby, the former form results from reanalysis of the oblique stem *kinn-t-* ‘father.in.law-POSS.3SG’ (Stapert 2013: 188–190).

As for verbs, relevant stems are often (historically) derived with the middle, reflexive and reciprocal suffixes -(I)n, -(I)IIN and -(I)s (see Section 12.4). However, also in the named environments, vowel syncope and metathesis do not occur in all stems. Chart 17 lists frequent instances of vowel syncope occurring in the INEL Dolgan Corpus, which cannot immediately be analyzed as derived stems from a synchronic point of view. Again, the first column shows the underived stem, the second column shows the syncopated stem, the third column shows metathesis, and the fourth column shows the stem in frequent morphological positions (present and postterminal past participles).

2.5.5 Consonant Deletion

As shown in Section 2.3.2, the only consonant clusters permitted in the coda position in Dolgan are *-rt* and *-lt*, e.g. in *hu:rt* ‘(temporary) camp’ and *bult* ‘haul’. When vowel-initial suffixes are attached, *-t* is regularly voiced to *-d*, e.g. *hu:rd-u* ‘camp-ACC’ and *buld-u* ‘haul-ACC’. When consonant-initial suffixes are attached, e.g. the dative-locative case suffix *-GA*, a consonant cluster consisting of three consonants would emerge, cf. **hu:rt-ka* ‘camp-DAT/LOC’ and **bult-ka* ‘haul-DAT/LOC’. In order to adjust these forms to the phonotactic system of Dol-

gan, the middle consonant *-t* is deleted. However, it still can be traced back by the fact that the suffix-initial consonant is voiceless—although it would be expected to be voiced when following the voiced consonants *r* and *l*, respectively. The following examples display the accusative and dative-locative case forms of the given nouns and two nouns ending with *r* and *l*, respectively.

hur 'camp' vs *hur*-*d*-*u* 'camp-ACC' vs *hur*-*ka* 'camp-DAT/LOC'

kar 'snow' vs *kar*-*i* 'snow-ACC' vs *kar*-*ga* 'snow-DAT/LOC'

bult 'haul' vs *bult*-*u* 'haul-ACC' vs *bult*-*ka* 'haul-DAT/LOC'

uol 'boy' vs *uol*-*u* 'boy-ACC' vs *uol*-*ga* 'boy-DAT/LOC'

Consonant deletion of *t* is relevant for both nominal and verbal stems ending with the consonant clusters *-rt* and *-lt*. In verbal morphology, this is especially relevant for the causative-passive suffix *-t*, when it is attached to verbal stems ending with *-l* or *-r*, e.g. *ih-er-pit* 'drink-CAUS-PTCP.PST', which is formed from *is-* 'drink' + *-(A)r* 'CAUS' + *-t* 'CAUS' + *-BIT* 'PTCP.PST' (see Section 12.4 for details).

Word Classes

3.1 Nouns

Nouns form the biggest and most prototypical subgroup of the class of nominals. They refer to concrete things or abstract concepts. Nouns can be divided into common nouns (Section 3.1.1) and proper nouns (Section 3.1.2). Moreover, there are several nouns in Dolgan, showing both formal and functional peculiarities, which can best be referred to as relational nouns (Section 3.1.3). Finally, there are two nouns in Dolgan, which predicate the existence or absence of a referent (Section 3.1.4). Morphologically, nouns are inflected for number, case and possession; moreover, they can take predicative suffixes (see Chapter 4). Syntactically, nouns form noun phrases that can fulfil all syntactic functions within a clause, i.e. they can be subjects, objects, adverbials and predicates (see Section 7.1 and Chapter 8).

3.1.1 Common Nouns

Common nouns are by far the most frequent type of nouns. Most of them denote concrete entities like *d'ie* 'house' or *balik* 'fish'. Abstract nouns like *geries* 'legacy' occasionally occur but are significantly more seldom. If there is a need for an abstract concept for the speaker, often Russian terms are used, like in example (6). However, as for now, no in-depth studies on the semantics of nouns in Dolgan have been conducted, which leaves space for further research.

- (6) *Onton ekanomika itte olok-torun huruj-but ol.*
 then economy EMPH life-POSS.3PL.ACC write-PST2.3SG that
 'Then he wrote about their economic life.'
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.020)

Nouns can be count nouns like *kihi* 'human', *taba* 'reindeer' or mass nouns like *u:* 'water', *uot* 'fire'. The former group exhibits all inflectional properties of nouns, whereas the latter group mostly lacks plural morphology.

3.1.2 Proper Nouns

Proper nouns are names of persons, places or other artificially named entities. Proper nouns can be of Dolgan origin but are also often borrowed from Russian. This is particularly true in the case of personal surnames and patronymics,

as Dolgans did not have an elaborate system of naming each other before the arrival of the Russians. Also, personal given names are often taken over from Russian, a large bunch of given names with Christian-Orthodox backgrounds already in the 18th and 19th centuries (see Section 11.2.1.3 for details). These names are widely adapted to Dolgan phonology, e.g. *Hemen* (< Russian *Semën*), whereas this does not apply to names recently borrowed or spontaneously mentioned in Dolgan discourse, e.g. *R'ita* (< Russian *Rita*). Toponyms frequently exhibit one original Dolgan variant and one variant borrowed from Russian, e.g. *Noskuō* 'Khatanga (settlement)' vs *Hatanga* 'id.'. Sometimes, toponyms lack a Russian variant, e.g. *Katirik* 'Katyryk (settlement)' (see also Barbolina 2014 for toponymy). Morphosyntactically, proper nouns behave like common nouns but exhibit some constraints, e.g., plural and possessive marking is rare.

3.1.3 *Relational Nouns*

Relational nouns form a subgroup of nouns that functionally stand very close to postpositions, denoting concepts like 'upper part' or 'space between'. Many of them hardly occur standing alone, but mostly together with another noun they relate to. In contrast to postpositions, however, they are regularly inflected like other nouns and do not govern any case of the noun they relate to. Therefore, they are definitely to be analyzed as nouns from a morphosyntactic point of view, though they bear the potential of grammaticalizing into postpositions. Chart 18 alphabetically lists the relational nouns occurring in Dolgan. The forms *atin*, *orun*, *örüt* and *ürüt* do not appear as free lexemes in the corpus, but only in bound stems. Therefore, they are marked as reconstructed here.

The most common functional domain of relational nouns is to express the location of a referent in relation to another referent. The relational noun is placed after the noun related to and is inflected for case and possession.

- (7) *La:jku ebe orto-tu-gar* *tij-en* *baran*
 Laajku river¹ middle-POSS.3SG-DAT/LOC arrive-CVB.SEQ after
ügüle:-bit: "Ka-ka!"
 shout-PST2.3SG ha-ha
 'Laajku reached the middle of the river and shouted: "Haha!"'
 (BeVP_1970_Laajku_flk.039)

1 Since rivers as well as some other natural phenomena are culturally tabooed, they must not be called by their proper names; here, *ebe*, actually meaning 'grandmother', is a taboo expression for 'river'.

- (8) *Agis klass kenn-i-tten* *bu Dud'inka-ga*
eight class back.part-POSS.3SG-ABL this Dudinka-DAT/LOC
i:p-pit-tara *üören-iêk-pin.*
send-PST2-3PL learn-PTCP.FUT-POSS.1SG.ACC
'After eight classes, they sent me here to Dudinka to study.'
(PoPD_KuNS_2004_Life_conv.PoPD.022)

CHART 18 Relational nouns

Relational noun	Meaning
<i>alin ~ anni</i>	lower part
<i>arit ~ ardi</i>	space between
<i>*atin ~ atti</i>	place beneath
<i>bis</i>	place between
<i>is</i>	inside
<i>ilin ~ inni</i>	front part
<i>ikkardi</i>	space between
<i>iksa</i>	proximity
<i>kelin ~ kenni</i>	back part
<i>*orun ~ onnu</i>	place; instead
<i>orto</i>	middle
<i>*örüt ~ öttü</i>	side
<i>tas</i>	edge
<i>tus</i>	side
<i>*ürüt ~ ürdü</i>	upper part

As can be seen in Chart 18, a couple of relational nouns exhibit variation in their lexeme form. All eight of them (*alin ~ anni*, *arit ~ ardi*, **atin ~ atti*, *ilin ~ inni*, *kelin ~ kenni*, **orun ~ onnu*, **örüt ~ öttü*, **ürüt ~ ürdü*) share the feature that the first-named variant has an unstable stem. Hence, it exhibits vowel syncope and metathesis in inflected forms, e.g. *inn-i-ger* 'front.part-POSS.3SG-DAT/LOC' and *inni-leri-ger* 'front.part-POSS.3PL-DAT/LOC' (see Section 2.5.4 for the relevant morphonological process). These variants are the original ones, and cognates can be found all over the Turkic languages, including Sakha. Stapert (2013: 176–188) has shown that in Dolgan, the forms have been reanalyzed, yielding lexeme forms like *inni* 'front part' (< *inn-i* 'front.part-POSS.3SG'), which are inflected like usual vowel stems, e.g. *inni-ti-ger* 'front.part-POSS.3SG-DAT/LOC'. The process seems to be ongoing since instances of variation can be observed for seven

of the named stems in the INEL Dolgan Corpus. *Arit* ~ *ardi* occurs only once in the corpus, but it can be stipulated that variation would be found in a larger amount of data. Examples (9) and (10) illustrate the variation of **ürüt* ~ *ürdü*.

- (9) *Dojdu ürd-ü-ger min haga ba:j huök.*
 world upper.part-POSS.3SG-DAT/LOC 1SG.PRO big.as rich NEG.EX
 'In this world, there is nobody as rich as I.'
 (ErSV_1964_WarBirdsAnimals_flk.136)

- (10) *Uol at-in ürdü-tü-ger*
 boy horse-POSS.3SG.GEN upper.part-POSS.3SG-DAT/LOC
oj-but, [...].
 jump-PST2.3SG
 'The boy jumped onto his horse [and galloped away].'
 (ErSV_1964_WarBirdsAnimals_flk.355)

Stapert (2013: 187) also points to an interesting detail concerning possible dialectal variation. As the reanalysis of those unstable stems is a peculiar Dolgan feature and (nearly) absent in Sakha, it could be expected that Upper Dolgan is more innovative here than Lower Dolgan since the latter is, as a tendency, closer to Sakha. This, however, is not the case according to Stapert (2013: 187), and the material analyzed here supports this claim. Thus, the reanalysis of unstable stems in relational nouns can be a good criterion for discriminating Dolgan speech against Sakha speech.

3.1.4 Existential Nouns *bar* and *huök*

Like all Turkic languages, Dolgan exhibits two existential nouns, namely *bar* 'there is' and *huök* 'there is not'. Most frequently, the existential nouns occur in non-verbal predication (see Section 8.2) and in verbal paradigm-building (see Sections 6.4 and 6.5). Additionally, both *bar* and *huök* can be used like usual nouns, i.e. exhibiting case and possession inflection and appearing in argument position in the clause. In example (11), the affirmative existential noun *bar* functions as an object, and in example (12), the negative existential noun *huök* functions as an adverbial.

- (11) *Tuök kuhagan bar-in bari-tin iti*
 what bad EX-POSS.3SG.ACC all-POSS.3SG.ACC that
il-atta-n ih-el-ler.
 take-MULT-CVB.SEQ go.AUX-PRS-3PL
 'They take away everything bad that is there.'
 (BeES_2010_HidePreparation_nar.030)

- (12) *Urut otto karči huōg-u-ttan* [...]
 earlier then money NEG.EX-POSS.3SG-ABL
 ‘Earlier because of the lack of money, [if you want to do something, well ...].’
 (PoPD_KuNS_2004_Life_conv.PoPD.106)

3.2 Adjectives

Adjectives are nominal items that describe properties and qualities, e.g. size, colour, dimension, material or the like. Morphologically, they hardly differ from nouns in Dolgan, and sometimes a lexeme can even be either a noun or an adjective, e.g. *ki:l* ‘wild; wild reindeer’ and *karaja* ‘dark; darkness’. Adjectives can be inflected for number, case and possession, but only in argument, adjunct and predicate position in the clause, that is, when functioning as a noun (13). In attribute position, in turn, adjectives are never inflected and consequently exhibit no agreement with their head noun ((14), see Section 7.1.2.2 for details).

- (13) *Min baj-ga bar-ia-m.*
 1SG.PRO rich-DAT/LOC go-FUT-1SG
 ‘I will go to the rich one.’
 (PoS_PrG_1964_Kaamyylaak_flk.053)
- (14) *Ba:j kihi-ler-i kula:č’ij-d-i:l-lar* [...]
 rich human-PL-ACC dekulakize-VBZ-PRS-3PL
 ‘Rich people are dekulakized, [merchants and the like probably].’
 (SuON_KuNS_19990303_HardLife_conv.SuON.064)

As a distinctive feature of the word class against nouns, adjectives can be compared. In Dolgan, however, adjectives do not exhibit synthetic forms of comparison but use analytic forms and constructions. The positive degree is unmarked. In the comparative degree, the adjective itself is unmarked, but the entity to which it is compared, the *standard*, exhibits ablative or comparative case morphology.

- (15) [...] *kat'er-da:gar* *da:* *ulkan boldog-u* *il-an*
 motorboat-COMP EMPH big big.stone-ACC take-CVB.SEQ
 bara:n, [...].
 after
 ‘[He appeared], having taken a stone even bigger than the motorboat, [he
 threw].’
 (KiPP_KuNS_2002_LegendOfBegichev_nar.KiPP.046)

The superlative degree can be expressed with the particles *muŋ* ‘most’ and *ha:maj* ‘most’ (< Russian *samyj* ‘id.’). Alternatively, the comparative construction with the universal quantifier *bari* ‘every; all’ as standard is used, like in example (16). Literally, the latter construction means “more X than all”.

- (16) *Kör-büt-e,* *bür d'ie* *bari-lari-ttan* *ulkan.*
 see-PST2-3SG one house all-POSS.3PL-ABL big
 ‘He saw, one house is the biggest [lit. bigger than all].’
 (BoND_1964_ThreeBrothers_flk.047)

In Section 8.2.5, the syntactic properties of the comparison of adjectives are discussed in detail.

Adjectives can be non-derived and derived in Dolgan. The former group contains expressions of such central concepts like *ulkan* ‘big’ or *küččügüj* ~ *kuččuguj* ‘small’, but also colours like *kihil* ‘red’ or temperatures like *timni:* ‘cold’. Derived adjectives form various semantic groups, e.g. temporal adjectives like *kühünŋü* ‘autumnal’ (< *kühün* ‘autumn’), propriative adjectives like *tu:stak* ‘salty’ (< *tu:s* ‘salt’), and locative adjectives like *tîata:gi* ‘from/of the (forest) tundra’ (< *tîa* ‘(forest) tundra’). Often, the borderline between derived and non-derived adjectives is fuzzy as in the case of *öjdö:k* ‘clever’, which is formally derived from *öj* ‘mind’, but appears to have lexicalized with a slight semantic shift, meaning ‘clever’ instead of ‘mindful’. In Section 12.1, the derivation of adjectives is discussed in more detail.

From a syntactic point of view, adjectives usually modify nouns (see Section 7.1.2.2), but they also occur as predicate adjectives in non-verbal predication (see Section 8.2.2). If adjectives are used as nouns, they can also appear in argument and adjunct positions in the clause.

3.3 Pronouns

Traditionally, pronouns are conceived as items that “stand for another noun”. Though being intuitively more or less correct, this definition fails when taking it seriously. Already the items *I* and *you* would be no pronouns anymore since they certainly do not replace another noun. The simple reason is that they do not refer to an extra-linguistic entity but indicate a discourse role (Bhat 2004: 2–3). Having this in mind, they differ from items like *this* or *that* since the latter two are indeed referring items. Therefore, Bhat (2004: 4) even states that “it is evident [...] that it would be impossible to formulate a definition that can take care of all pronouns”. His solution to the problem is to distinguish personal pronouns from other so-called pro-forms, assuming that they do not necessarily form a joint class (Bhat 2004: 5). More precisely, the class of personal pronouns might even be restricted to first- and second-person pronouns, whereas third-person pronouns could belong to the latter class. It goes far beyond the scope of the grammar at hand to discuss theoretical and terminological problems of pronouns. However, it can be stated cautiously that the division between personal pronouns and pro-forms allows a very concise description of pronouns in Dolgan. Therefore, the personal pronouns are discussed in Section 3.3.1, and all other pro-forms afterwards in Section 3.3.2.

3.3.1 Personal Pronouns

Dolgan exhibits six personal pronouns that indicate the discourse role of the indicated referent. Chart 19 shows their lexicon forms.

Considering Bhat’s (2004) eventual restriction of personal pronouns to pronouns of the first and second person, some short comments are in order here. The first- and second-person pronouns indicate the discourse role “speaker” and “hearer”, respectively, and are unproblematic from the theoretical perspective adopted here. Their plural counterparts, *bihigi* and *ehigi*, are no paradigmatic plural forms of *min* and *en* but go back to these stems. The clauses in (17) to (19) exemplify the personal pronouns of the first and second person.

CHART 19 Personal pronouns

	Singular	Plural
First person	<i>min</i>	<i>bihigi</i>
Second person	<i>en</i>	<i>ehigi</i>
Third person	<i>gini</i>	<i>giniler ~ ginner ~ giller</i>

- (17) *Ani min kisten-iē-m, diē-bit kutujak, “en*
 now 1SG.PRO hide-FUT-1SG say-PST2.3SG mouse 2SG.PRO
kördör.”
 search.IMP.2SG
 “Now I will hide”, the mouse said, “you search”
 (AkEE_19900810_ReindeerMouse_flk.014)
- (18) *Onno Tajmī:r-tan bihigi bar-bīp-pīt ikki kihi.*
 thither Taimyr-ABL 1PL.PRO go-PST2-1PL two human
 ‘From Taimyr, we went there [with] two persons.’
 (UkOA_2010_Festival_nar.UkOA.003)
- (19) *Iti tuh-u-nan ehigi kajtak d-i: han-i-git?*
 this side-POSS.3SG-INS 2PL.PRO how say-CVB.SIM think-PRS-2PL
 ‘How do you think about this?’
 (PoNA_2004_SnowOwl_flk.030)

The personal pronouns of the third person are *gini* and *giniler*, whereby the third-person plural form *giniler* is a simple combination of *gini* and the plural marker -LAr. From a comparative point of view, they are cognate with Sakha *kini* and *kiniler* (Ubrjatova et al. 1982: 188) but differ from the forms used in more distantly related Turkic languages (e.g. Turkish *o*, Tatar *ul*), which are distal-anaphoric demonstratives. More precisely, they are cognate with, e.g. the Turkish reflexive pronoun *kendi* (Tenišev 1988: 207–208; Johanson 2021: 520). The third-person plural pronouns exhibit some variants. In texts from the volume *Fol'klor Dolgan* (Efremov 2000), the forms *kini* and *kiniler* occur, thus the same as in Sakha. Since speakers of Sakha edited the volume, it is at least doubtful whether *kini* and *kiniler* are indeed the original Dolgan forms. Apart from this, the third-person plural form *giniler* has the allegro forms *ginner* and *giller*, which are free variants.

Gini and *giniler* almost exclusively refer to human referents. If the referent is non-human, a demonstrative pro-form is used instead. This pattern is undoubtedly a good argument for counting *gini* and *giniler* as proper personal pronouns since they behave similarly to the first- and second-person pronouns in this respect. On the other hand, two morphological features point to analyzing *gini* and *giniler* as other pro-forms: First, the plural form *giniler* is a regular combination of the singular form *gini* with the plural marker -LAr (similarly to, e.g. *bu* ‘this’ and *bular* ‘these’). Therefore, the personal pronouns show a split between the first/second person and the third person on the animacy hierarchy (Däbritz 2021b: 126–127). Second, the forms can be inflec-

ted with possessive suffixes for the purpose of reference tracking (see Section 10.3). Especially the latter feature shows that *gini* and *giniler* indeed are used as referring items that not only indicate a discourse role. For the sake of convenience, however, they are dealt with together with the first- and second-person pronouns here. The examples (20) and (21) show the third-person pronouns.

- (20) *Bari pas'olka-lar-i gini ötüö-tük bil-er*
 all settlement-PL-ACC 3SG.PRO good-ADVZ know-PTCP.PRS
e-t-e.
 AUX-PST1-3SG
 'All the settlements he knew well.'
 (PoNA_AkPG_1994_MPXarlampiev_nar.PoNA.047)

- (21) *Kurpa:ski-lar korguj-but-tar, giniler as kördön-ö mas*
 partridge-PL hunger-PST2-3PL 3PL.PRO food search-CVB.SIM forest
diëkki köp-püt-ter.
 in.direction fly-PST2-3PL
 'The partridges hungered, and they flew to the forest to search for food.'
 (ErSV_1964_WarPartridgesPikes_flk.005)

There are no particular honorific forms of personal pronouns like English *You* or German *Sie*. Sometimes the personal pronoun of the second person plural *ehigi* is used in relevant contexts. In the INEL Dolgan Corpus, this occurs exclusively in relatively recent radio recordings when addressing another person. Therefore, this feature can safely be regarded as a calque from Russian.

- (22) *Ehe, Ol'ga N'ikalajevna, ehigi keps-ir e-ti-git, [...].*
 PTCL Olga Nikolaevna 2PL.PRO tell-PTCP.PRS AUX-PST1-2PL
 'Well, Olga Nikolaevna, You were telling [...].'
 (SuON_KuNS_19990303_HardLife_conv.KuNS.042)

Personal pronouns are regularly inflected for case, the forms of the third person also for possession. Their inflectional morphology is described in detail in Section 5.1.

Additionally, the described personal pronouns have possessive forms, often labelled as possessive pronouns in existing grammatical descriptions. As they are derived from the personal pronouns in Dolgan, and as their referential behaviour is similar to personal pronouns, they are analyzed here as possessive forms of personal pronouns. The possessive pronouns are formed by

CHART 20 Possessive forms of personal pronouns

	Singular	Plural
First person	<i>miniêne ~ miêne</i>	<i>bihîene</i>
Second person	<i>eniêne</i>	<i>ehîene</i>
Third person	<i>giniêne</i>	<i>giniënnere ~ giniëttere</i>

CHART 21 Plural of possessive forms of personal pronouns

	Singular	Plural
First person	<i>miniënnere ~ miënnere ~ miniëttere ~ miëttere</i>	<i>bihîënnere ~ bihiëttere</i>
Second person	<i>eniënnere ~ eniëttere</i>	<i>ehiënnere ~ ehîëttere</i>
Third person	<i>giniënnere ~ giënnere ~ giniëttere ~ giëttere</i>	

adding the suffix *-îene* to the respective personal pronoun. The origin of the suffix is unclear (see the discussion in Ubrjatova (1985: 90–95)); however, it is essential to note that it is a combination of the element *-îen* and the third-person singular possessive suffix *-e*. The latter is proven by the fact that the plural marker *-LAR* is inserted between these two elements in plural forms (see below). Chart 20 shows the possessive forms of the personal pronouns in Dolgan.

The possessive forms of personal pronouns can be inflected for number, that is, refer to more than one possessed item, yielding the forms shown in Chart 21. In the third-person forms, the plural marker *-LAR* can occur only once. This restriction leads to homonymous forms (singular possessor and plural possessee vs plural possessor and singular possessee vs plural possessor and plural possessee) since the plural marker points to the plurality of both possessors and possesseees. Only the context can disambiguate these homonymous forms.

Case inflection of the possessive forms of personal pronouns does not occur regularly, which is not surprising given their limited functional domain (see below). However, a few inflected forms can be found in the INEL Dolgan Corpus, which is why an example is given here for the sake of completeness.

- (23) *Basta:n* *miniēnin hiē-bip-pit.*
 begin.as.first-CVB.SEQ my.ACC eat-PST2-1PL
 'First, we ate my [stored food].'
 (ErSV_1964_WarBirdsAnimals_flk.093)

The central function of the possessive forms of personal pronouns is to express the pronominal possessor in adnominal possessive constructions. However, the respective bare personal pronoun can also be used in such contexts, or the pronoun may be dropped (see Section 7.1.2.3 for the syntax of noun phrases modified with a possessor). Additionally, the respective possessive suffix is added to the item referring to the possessee in either case. The usage of the possessive pronouns seems optional, which can be demonstrated by the examples (24) to (26): Neither a functional nor a formal motivation can be detected for or against the use of the possessive pronouns.

- (24) *Basi:laj e-t-e* *miēne er-im* *a:t-a.*
 Vasily be-PST1-3SG my husband-POSS.1SG name-POSS.3SG
 'Vasily was my husband's name.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.052)
- (25) *Prosta, min ogo-lor-um* *īald'-an-nar*
 simply.R 1SG.PRO child-PL-POSS.1SG be.sick-CVB.SEQ-3PL
kördön-ön kel-bit-im.
 beg-CVB.SEQ come-PST2-1SG
 'Just because my children were sick, I begged [for letting me go] and came.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.150)
- (26) *Aga-m* *e-t-e* *Katig'inskaj N'ikolaj Gavr'ilov'ič'.*
 father-POSS.1SG be-PST1-3SG Katyginskiy Nikolay Gavrilovich
 'My father was Nikolay Gavrilovich Katyginskiy.'
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.004)

As for word order, the possessive forms of personal pronouns (in contrast to bare personal pronouns) do not have to stand adjacently to their head noun. Moreover, they can stand after it or even postverbally, forming discontinuous noun phrases (see Section 7.1.3 for details).

- (27) *Ogo-lor-um* *īald'-ar* *e-ti-ler* *miniēttēre.*
 child-PL-POSS.1SG be.sick-PTCP.PRS AUX-PST1-3PL my.PL
 'My children were being sick.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.049)

The existing grammatical descriptions also mention that the possessive forms can function as the predicate of the clause, like in example (28). Such instances do not occur in the corpus data analyzed, but this may also be due to the low frequency of these constructions.

- (28) *Bu d'îe minîene.*
 this house my
 'This house is mine.'
 (Ubrjatova 1985: 90; own glossing and translation)

Finally, the possessive forms of personal pronouns in Dolgan share both formal and functional properties with the adjective *gîen(e)* 'own'. The formal parallel is evident so that Artem'ev (2013b: 148) even suggests that the possessive forms historically come from the combination of personal pronouns and this adjective (e.g. *min* + *gîene* > *minîene*). Functionally, phrases with the adjective *gîen(e)* emphasize the belonging of the possessee to exactly the named possessor.

- (29) *Ol ürek-ke kuôka: gîen-e olog-o.*
 that river-DAT/LOC pike own-POSS.3SG place.of.living-POSS.3SG
 'In that river, there is the pikes' place of living [opposed to the place of living of the partridges].'
 (ErSV_1964_WarPartridgesPikes_flk.016)

3.3.2 Other Pro-Forms

3.3.2.1 Reflexive/Emphatic Pronoun

Dolgan exhibits the pronominal stem *beje-* whose inflected forms can fulfil both reflexive and emphatic functions. As for its origin, *beje-* is undoubtedly not a cognate of functional equivalents in other Turkic languages, e.g. Tatar *üz*, Uyghur *öz* or Turkish *kendi*, but a loanword. Tenišev (1988: 208) analyzes it as a Tungusic loanword, corresponding to, e.g. Ewenki *bəjə* 'body; human; man; personality' (Vasilevič 1958: 73), which semantically certainly holds. However, Kałużyński (1961: 40) accounts for it as a Mongolic loanword in Sakha, cf. Written Mongolian *beje* and Khalkha Mongolian *bija*. Given that Khalkha Mongolian synchronically uses the item as a reflexive pronoun in oblique cases (Janhunen 2012: 141), Kałużyński's account seems more feasible. Consequently, the item was borrowed from Mongolic to both Ewenki and Pre-Dolgan-Sakha, but it preserved its reflexive function only in the latter. In turn, the Dolgan cognate of Tatar *üz*, Uyghur *öz* is *üös* 'middle' and shows no grammaticalized function anymore. The cognate of Turkish *kendi* was re-interpreted as the third-person

CHART 22 Reflexive/Emphatic pronoun

	Singular	Plural
First person	<i>beje-m</i>	<i>beje-bit</i>
Second person	<i>beje-ŋ</i>	<i>beje-git</i>
Third person	<i>beje-te</i>	<i>beje-lerε</i>

personal pronoun *gini* ~ *kini* in both Dolgan and Sakha (see Section 3.3.1). *Beje-* does not occur in its lexicon form since person-number reference is obligatory, expressed via possessive suffixes (see Section 5.2.1). Chart 22 shows the nominative person-number forms of *beje-*.

The usage of *beje-* as a reflexive pronoun signals that the subject of the clause and *beje-* refer to the same entity. The form *beje-* can be in object position in the clause (30), but it also can function as an adverbial (31) or as an adnominal modifier (32). If the relevant syntactic function calls for case marking, *beje-* is inflected for case.

If *beje-* appears in object position in the clause, the clause expresses reflexive voice since an agent-like and a patient-like argument of the verb refer to the same entity. Indeed, reflexive voice can be expressed like in example (30). However, verbal derivational suffixes can also signal co-reference of the subject and the object in the clause (see Sections 7.3.2.2 and 12.4 for a detailed account).

- (30) *Beje-lerin* *a:t-tan-al-lar* *“t̃iā*
 self-POSS.3PLACC name-VBZ.REFL-PRS-3PL tundra
kihi-ler-e” *d̃iē-n.*
 human-PL-POSS.3SG say-CVB.SEQ
 ‘They call themselves “tundra people” [= Dolgans].’
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.079)

- (31) *Aga-bit* *beje-ti-ger* *ke:h-er*
 father-POSS.1PL self-POSS.3SG-DAT/LOC let-PRS.3SG
Oloksa:-tin.
 Oloksa-POSS.3SG.ACC
 ‘Our father keeps Oloksa with/at himself.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.032)

- (32) *Araj beje-tin hir-i-ger tij-bit*
 only self-POSS.3SG.GEN place-POSS.3SG-DAT/LOC reach-PTCP.PST
e-bit.
 AUX-PST2.3SG
 'He had arrived at his own place, apparently.'
 (AkEE_19xx_BoySister_flk.144)

Apart from the expression of reflexivity, a pervasive function of *beje-* is emphasizing its co-referential item. In this case, *beje-* is not necessarily co-referential to the subject of the clause but can be co-referential to any other referring constituent. If the co-referential item is pronominal, it is often dropped. The clauses in (33) to (36) show examples of this functional domain of *beje-*.

- (33) *Tiā-ta:gi-lar-iŋ beje-lerē bil-el-ler buō kajdak*
 tundra-ADJZ-PL-POSS.2SG self-POSS.3PL know-PRS-3PL EMPH how
olor-uōk-tarin.
 live-PTCP.FUT-POSS.3PL.ACC
 'The people of the tundra know themselves how they will live.'
 (UkOA_KuNS_20xx_LifeNovorybnoe_conv.UkOA.008)
- (34) *E: Xanti-Mansijskaj-tan beje-ti-tten t'eatral'naj gruppā bar*
 eh Khanty-Mansiysk-ABL self-POSS.3SG-ABL theatre group EX
e-t-e bihiēne ansambl' Hejro-but kōrdük.
 be-PST1-3SG our ensemble Hejro-POSS.1PL like
 'Eh, from Khanty-Mansiysk itself, there was a theatre group like our ensemble "Hejro".'
 (UkOA_2010_Festival_nar.UkOA.032)
- (35) *Beje-m slavar' oŋuōst-o:čču e-ti-m.*
 self-POSS.1SG dictionary make-PTCP.HAB AUX-PST1-1SG
 'I myself was compiling a dictionary.'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.192)
- (36) *Ita: ita:ma, beje-ŋ igir-bit-iŋ.*
 cry.IMP.2SG cry-NEG.IMP.2SG self-POSS.2SG call-PST2-2SG
 'Cry or do not cry, you have called it [= a reindeer] yourself.'
 (PoTY_2009_Aku_nar.072-073)

3.3.2.2 Reciprocal Pronoun

The reciprocal pronominal stem is *beje beje-*, formed by reduplication of the reflexive/emphatic pronominal stem *beje-*. Only its latter part is inflected; see Section 5.2.2 for details. The reciprocal pronoun is used when two referents perform the given action mutually, i.e. act on each other. Often the referents are both the agent and the patient of the same action performed. In example (37), both referents kill and are killed; in example (38), both referents love and are loved.

- (37) [...] *da ette-h-en beje-beje-lerin ölor-ön*
 and hit-RECP-CVB.SEQ self-self-POSS.3PL.ACC kill-CVB.SEQ
ke:h-el-ler.
 throw.AUX-PRS-3PL
 ‘[The old woman took the other thigh] and hitting each other, they kill each other.’
 (YaP_1930_GroomFromUpperWorld_flk.042)

- (38) [...] *bihigi domnuŋ-ŋu-ttan bagar-s-a-bit,*
 1PL.PRO long.ago-ADJZ-ABL love-RECP-PRS-1PL
beje-beje-bitin hürde:k kili:l-i-bit.
 self-self-POSS.1PL.ACC very esteem-PRS-1PL
 ‘[How long will we hide], we love each other for a long time, we esteem each other a lot.’
 (NaLE_2002_StonyBone_flk.018)

As can be seen from both examples, reciprocity can also be expressed via a derivational suffix at the verb (see Section 12.4). In example (37), the reciprocal pronoun and the reciprocal derivational suffix co-occur, whereas one option is chosen in each of the two clauses in the example (38). Consequently, the usage of the reciprocal pronoun may make the use of the reciprocal suffix obsolete and vice versa (see also Section 7.3.2.2).

Moreover, the analyzed material shows sporadic instances of expressing reciprocity with the reduplicated noun *dogor* ‘friend’, which also can be inflected for person-number and case. Again, the item can facultatively co-occur with reciprocal voice marked at the verb. From an areal perspective, the Northern Samoyedic languages exhibit the same pattern, however, without reduplication of the item: Forest Enets *kasa* ‘companion’ (Siegl 2013b: 194), Nganasan *ña* ‘companion; friend’ (Wagner-Nagy 2019: 105), Tundra Nenets *n’a* ‘companion; sibling; friend; relative’ (Nikolaeva 2014: 49). Assumedly, the Dolgan pattern appears due to Samoyedic substrate influence.

- (39) [...] *dogor dogor höbüle-s-ti-bit, bagar-is-ti-bit.*
 friend friend agree-RECP-PST1-1PL love-RECP-PST1-1PL
 ‘[And so having courted], we agreed and fell in love with each other.’
 (ChNM_2009_Vika_nar.031)
- (40) [...] *dogor dogor-un üt-e-üt-e*
 friend friend-POSS.3SG.ACC push-CVB.SIM-push-CVB.SIM
 o-lor-u h-il-ler.
 that-PL-ACC eat-PRS-3PL
 ‘[Hm, and these reindeer] eat the [fodder briquets], pushing each other.’
 (FeAP_2009_ReindeerDisease_nar.033)

3.3.2.3 Demonstratives

Dolgan has an extensive system of demonstratives that exhibit much variation. In order to provide an overview of the inventory of demonstrative pro-forms, Chart 23 summarizes them.

The central demonstrative items are the demonstrative pronouns *bu*, *iti* and *ol*. As it is typical for Turkic languages (Johanson 2021: 514–515), the system of demonstrative pronouns is threefold: *bu* ‘this (here)’ vs *iti* ‘this/that (there)’ vs *ol* ‘that’. Attaching the emphatic prefix *h-*, the emphatic demonstrative pronouns *hubu* ‘exactly this (here)’, *hiti* ‘exactly this/that (there)’, and *hol* ‘exactly that’ emerge. A prefix in a Turkic language is indeed unexpected and calls for comment. Whereas Dolgan regularly uses this prefix to derive emphatic demonstrative pronouns, the emerging forms can be diachronically connected to the medial demonstrative pronouns in other Turkic languages. Relevant instances are, e.g. Turkish <şu> [šu] ‘this here, the following’ and Kirghiz (*u*)šul ‘this here’; see Johanson (2021: 393) for the diachronic phonology. Additionally, the suffix -Llk forms the demonstrative adjectives *mannik* (*munnu*, *bunnu*) ‘such like this here’, *itinnik* ‘such like this/that there’ and *onnuk* ‘such like that there’ from *bu*, *iti* and *ol*, respectively. Finally, many demonstrative adverbs like *manna* ‘here’ or *oččogo* ‘then’ are also formed from *bu*, *iti* and *ol*; they are described in Section 3.6.3.

Besides that, there are two much less frequent items, which occur as demonstrative pronouns: *ba:gi* ~ *ma:gi* ‘this, that’ and *bili* ‘(exactly) this’. *ba:gi* ~ *ma:gi* ‘this, that’ is a combination of *bu* ‘this’ and the adjectivizing suffix -GI, whereas the formal origin of *bili* ‘exactly (this)’ is mysterious.

As can be seen from Chart 23, the demonstratives *bu*, *iti* and *ol*, as well as their derivatives, can be used both deictically and endophorically. In contrast, *ba:gi* ~ *ma:gi* and *bili* seem to fulfil only endophoric functions. In example (41), *bu* ‘this’ is used deictically in the given context, but in another context, it could poten-

CHART 23 System of demonstrative pro-forms

Deictic-endophoric demonstratives			
	Pronoun	Emphatic pronoun	Pro-adjective
Proximal	<i>bu</i>	<i>hubu</i>	<i>mannik</i> (<i>munnu</i> <i>k</i> , <i>bunnu</i> <i>k</i>)
Medial	<i>iti</i>	<i>hiti</i>	<i>itinnik</i>
Distal	<i>ol</i>	<i>hol</i>	<i>onnuk</i>

Endophoric demonstratives	
Pronoun	Emphatic pronoun
<i>ba:gi</i> ~ <i>ma:gi</i>	<i>bili</i> ‘(exactly) this’
‘this, that’	

tially function as an endophoric device, too. Example (42), in turn, appears to be unambiguous in this respect since *bili* cannot point deictically to an extra-linguistic entity, but it refers to a contextually given referent.

- (41)

Bu kolbuja-ga ilü-gin ug-uma.
this chest-DAT/LOC hand-POSS.2SG.ACC stick-NEG.IMP.2SG
‘Do not stick your hand into this chest.’
(AkEE_19900810_PearlBeard_flk.063)
- (42)

[...] *bili d’îe-ler-i kata:-n kebih-el-ler.*
exactly.this house-PL-ACC lock-CVB.SEQ throw.AUX-PRS-3PL
‘[While the animals were eating], exactly these houses [where the protagonist lives] were being locked up.’
(PoMA_1964_FoxDeceiver_flk.020)

Therefore, there are two major functional domains of demonstratives in Dolgan. On the one hand, they serve to express (local) deixis, and on the other hand, they are involved in endophoric (anaphoric and cataphoric) references within the discourse.

Expressing local deixis means locating a discourse referent within the speech situation. Cross-linguistically, there are two standard systems: Either the given referent is situated with respect to the discourse participants (near

the speaker vs near the hearer vs neither near the speaker nor the hearer) or with respect to the position of the speaker (e.g. close vs far away). In threefold systems of the latter type, proximal, medial and distal deictic expressions are distinguished (Bhat 2004: 177–182). Turkic languages usually use the speaker-oriented system (Johanson 1998a: 40), Dolgan being no exception here.

The demonstrative *bu* refers to items in the immediate vicinity of the speaker. In example (41) above, the speaker shows his chest to a girl. The chest stands apparently beneath him and, thus, proximal deixis can be assumed. The same is true in example (43) since the speaker tells something about the place where she is now, namely the settlement of Syndassko.

- (43) *Bu dojdū-ga aragi: huōk.*
this land-DAT/LOC alcohol NEG.EX
 'In this land, there is no alcohol.'
 (KiPP_2009_Story_nar.KiPP.022)

The demonstrative *iti* refers to items further away but still in the field of vision of the speaker. In examples (44) and (45), which describe the same situation, both speakers look at the same bow and refer to it using *iti*. They are probably not standing immediately beneath the bow but certainly see it. Therefore, medial deixis can be assumed to be expressed here. Moreover, the examples clearly show that spatial deixis in Dolgan does not depend on discourse roles; otherwise, two different participants of the same speech situation could not use the same demonstrative.

- (44) *Iti kim ha:ta=j?*
that who bow-POSS.3SG=Q
 'Whose bow is that?'
 (ChuAE_1968_Lyypyrdaan_flk.028)

- (45) *Iti ha: kü:h-e taksi-bit, ol iħin ke:s-pit-e.*
that bow power-POSS.3SG go.out-PST2.3SG that for let-PST2-3SG
 'The power of that bow ended, therefore he let it there.'
 (ChuAE_1968_Lyypyrdaan_flk.033)

The demonstrative *ol* prototypically refers to referents, which are not in the field of vision of the speaker, whereby distal deixis and endophora often cannot sharply be discriminated against each other. Example (46) is from the tale *The Snow Owl*: The birds decided to fly to the south in winter, and now their leader utters the following sentence, referring to the place of their upcoming overwintering.

- (46) *Bu timni:-bit a:h-îa-r dîeri ol*
 this cold-POSS.1PL pass-PTCP.FUT.POSS.3SG-DAT/LOC until **that**
hir-ge ologur-ûogun.
 place-DAT/LOC settle-IMP.1PL
 'Until the cold is over, let us settle at that place.'
 (ErSV_1964_SnowOwl_flk.016)

However, the distinction of proximal, medial and distal deixis is often more fluent and fuzzy in natural speech. In example (47), the speaker sits at a table and points to this table using the distal demonstrative *ol*. Assumedly, the deictic function itself is more important in this context than establishing spatial reference since only one table is available in the given speech situation.

- (47) *Ol ba:r ostol.*
that EX table
 'Here is the table.'
 (KiPP_NN2_2009_Clothes_nar.KiPP.021)

In a slightly more abstract sense, demonstratives can also express temporal deixis. Here, a twofold distinction *now* versus *then* can be observed, whereby *bu* primarily refers to the time (period) of the utterance, and *iti* and *ol* to another time (period).

- (48) *Hana:-ŋ kajdag=ij ani bu d'il-lar-ga bu*
 soul-POSS.2SG how=Q now **this year-PL-DAT/LOC** this
kenni-ki?
 back.part-ADJZ
 'How is your mind now in these years, in the last ones?'
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.062)

- (49) *Tak, tûörd-ûon biēs, tûörd-ûon alta, iti iti d'il-lar-ga.*
 so.R four-ten five four-ten six **that that year-PL-DAT/LOC**
 'So, [19]45, [19]46, in those years.'
 (PoNA_AkPG_1994_MPXarlampiev_nar.PoNA.002)

- (50) *Bari-ta, inastrannaj agaj huōk buōl-a:čči e-t-e*
 all-POSS.3SG foreign only NEG.EX be-PTCP.HAB AUX-PST1-3SG
ol d'il-lar-ga.
 that year-PL-DAT/LOC
 'Everything, there were only no foreign [languages] in those years [in school education].'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.127)

The second central functional domain of demonstratives is to express endophora (mostly anaphora, but also cataphora) within a discourse. When expressing anaphoric relationships, the respective referent must be aforementioned or inferable in the discourse (see Section 10.3). Functionally, the three basic demonstrative pronouns do not differ significantly in natural discourse, although the tendency can be observed that proximal *bu* and medial *iti* are more constrained concerning their range. These two items are mainly used when their antecedent occurs in the immediate linguistic context, whereas *ol* is more flexible. Statistically, roughly two-thirds of relevant constructions contain *ol* in the analyzed material; the demonstratives *bu* and *iti* form the remaining third and are more or less equally often used. The examples (51) to (53) show their usage.

- (51) *Min o-lor-go it-illi-bit-im – ogonn'or*
 1SG.PRO that-PL-DAT/LOC bring.up-PASS-PST2-1SG old.man
eme:ksin ikki.
 old.woman two
 '[Me myself he gives to completely unknown people, me.] I was brought up by them—an old man and an old woman.'²
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.035)
- (52) *Kalxoz d'on-o össüō iti-ni bil-bet-ter.*
 kolkhoz people-POSS.3SG still that-ACC know-NEG.PRS-3PL
 '[Fishing according to the plan is a difficult matter.] The kolkhoz people do not know it yet.'
 (PoNA_19910207_Fishing_nar.029)

2 The construction *ogonn'or eme:ksin ikki* is unusual for Dolgan and its origin can hardly be retrieved. Kažyński (1961: 119) hints at similar constructions in Sakha taken over from Mongolic, so that the observed Dolgan pattern might be explained likewise. Nevertheless, it can be evenly well an idiolectal idiosyncrasy since further similar instances do not occur in the studied material.

- (53) *Leykej bu-nu kep-pit-e.*
 snow.owl **this-ACC** dress-PST2-3SG
 ‘[The snow owl’s wife sewed a coat which was whiter than that of a goose.]
 The snow owl dressed it.’
 (ErSV_1964_SnowOwl_flk.058)

In similar contexts, demonstrative pronouns inflected with possessive suffixes (see Section 5.2.3) can occur. In such instances, only seldom a prototypical possessive relation is expressed, but primarily this construction serves once more for establishing anaphoric reference and, thus, for purposes of reference tracking. Here, the demonstrative *ol* makes up nearly 90% of the instances in the analyzed material, whereas *bu* and *iti* are used significantly less often. Moreover, the combination of the demonstrative pronoun with the possessive suffixes of the second and third person singular is most frequent, though other persons also do occur. Whereas the examples (54) to (56) merely show this functional domain, in Section 10.3, all relevant aspects of reference tracking are discussed in more detail.

- (54) *On-tu-ta uol ogo-lo:k.*
that-POSS.3SG-POSS.3SG boy child-PROPR
 ‘[So living, this merchant has a milkmaid, somebody who milks the cows.]
 That one/she has a son.’
 (KiMN_19900417_Milkmaid_flk.004)

- (55) *M'il'is'ije-ler kel-en il-pit-ter onton*
 policeman-PL come-CVB.SEQ take-PST2-3PL then
mun-tu-gun oksu-but-u-gar.
this-POSS.3SG-POSS.2SG.ACC beat-PTCP.PST-POSS.3SG-DAT/LOC
 ‘Policemen came and took [him] after he had beaten this one/her.’
 (ChGS_UoPP_20170724_SocCogOrder_conv.UoPP.035)

- (56) *In-ti-git ehigi-ni abir-i: köt-ö*
that-POSS.3SG-POSS.2PL 2PL.PRO-ACC help-CVB.SIM fly-CVB.SIM
hild'-ar.
 go.AUX-PRS.3SG
 ‘[Don’t you know that a bird [= aircraft] of the Soviets is coming?] That one/it is flying to help you.’
 (PoNA_1970_NeverSeenBird_nar.069)

Finally, also *ba:gi* ~ *ma:gi* ‘this, that’ and *bili* ‘(exactly) this’ express endophoric reference within a discourse. The use of the former item can be illustrated by example (57), whereas the use of the latter item was already shown above by example (42). Given the low frequency of these items, however, it has to be said that their range of functions is not fully understood yet and calls for further research. It would be especially worth testing whether they really cannot be used in a deictic function and how their endophoric usage differs from *bu*, *iti* and *ol*.

- (57) *Ba:gi-ni uōb-an ke:s-pit –*
that-ACC put.in.mouth-CVB.SEQ throw.AUX-PST2.3SG
kirsa-ta.
 polar.fox-POSS.3SG
 ‘[That one became a mouse, having become a mouse, the old man goes.]
 It devoured that one, the polar fox.’
 (PoXN_19701118_Chopochuka_flk.013)

3.3.2.4 Interrogative Pronouns

Dolgan exhibits a bunch of interrogative pronouns, which often show formal similarities to the semantically corresponding demonstratives. Five interrogative pronouns are inflected for case and number: *tūōk* ‘what’, *kim* ‘who’, *kannik* ‘what kind of’, *kas* ‘how many’ and *tōhō* ‘how much; how many’ (see Section 5.2.4). The other interrogative pronouns do not exhibit inflection.

Tūōk ‘what’ and *kim* ‘who’ ask for nominal referents. Their distinction lies in animacy and personhood: *tūōk* asks for non-human and mostly inanimate referents (58), whereas *kim* asks for animate and mostly human referents (59).

- (58) *D'e, iti kiē kopsok ih-i-ger tūōk ba:r=ij?*
 well, this PTCL storage inside-POSS.3SG-DAT/LOC **what** EX=Q
 ‘Well, what is inside this storage?’
 (KiMN_19900417_Milkmaid_flk.034)

- (59) “*Kim üōret-er, d-i:r.*
who teach-PRS.3SG say-PRS.3SG
 “Who is teaching [you]?” he says.’
 (PoMA_1964_YoungCzar_flk.098)

Animal referents, having the values [– human] and [+ animate], are border cases and are asked for with either interrogative pronoun. As a tendency, animals of hunt or cattle require *tūōk*, but animals acting as protagonists in tales

require *kim*. In example (60), the speaker talks about different reindeer in her family's herd. Example (61), in turn, is from a tale, the leader of the birds asking the other birds what they plan to do.

- (60) *Tugut, abilaka:n du tūōk du, [...].*
 calf one.year.old.reindeer Q what Q
 'A reindeer calf, a one-year-old reindeer or what, [a one-year-old reindeer, eh, one year older than a calf].'
 (PoTY_2009_Aku_nar.051)

- (61) *Kim ajann-i:r-i höbül-ür?*
 who travel-PTCP.PRS-ACC agree-PRS.3SG
 'Who agrees to travel?'
 (PoNA_2004_SnowOwl_flk.024)

Kannik 'what kind' asks for qualities, i.e. for adjectives, or the selection from a set of given referents. In example (62), the speaker asks for a description of the brigade referred to, but in example (63), the speaker wants to know which unit—from a predefined subset of units, namely the units taking part in the war—the hearer is part of.

- (62) *Brigada-git ke kannik e-t-e=j, brigada-git?*
 brigade-POSS.2PL PTCL what.kind be-PST1-3SG=Q brigade-POSS.2PL
 'What kind of brigade was yours, your brigade?'
 (ChSA_KuNS_2004_ReindeerHerding_conv.KuNS.003)

- (63) *Kannik č'a:s-taŋ-ŋin=ij?*
 which part-ABL-2SG=Q
 'From which unit are you?'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.075)

Kas 'how many' and *töhö* 'how much; how many' ask for quantifications, i.e. for numerals or quantifiers. The former item exclusively asks for countable referents, the latter for countable and uncountable referents. The examples (64) and (65) show these interrogative pronouns.

- (64) *Kas ogo-lo:k e-ti-gin=ij oččogo?*
 how.many child-PROPR be-PST1-2SG=Q then
 'How many children did you have then?'
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.056)

- (65) *D'ie ih-i-ger, töhö da ajda:n*
house inside-POSS.3SG-DAT/LOC how.much EMPH noise
būol-lun, [...].
be-IMP.3SG
'Inside the house, how much noise there may be, [the creaking can be heard when someone opens the door].'
(PoNA_2004_MikaMukulajAloneAtHome_nar.006)

CHART 24 List of interrogatives

Interrogative	Meaning
<i>tūōk</i>	what
<i>kim</i>	who
<i>kannik</i> (<i>kannuk</i>)	what kind; which
<i>kaja</i>	what kind
<i>kajdak</i> (<i>kajtak</i>)	how
<i>kahan</i>	when
<i>kaččaga</i> (<i>kačča</i>)	when
<i>kajdiēk</i> (<i>kajdiēt</i>)	whither, in which direction
<i>kanna</i>	whither; where
<i>kantan</i> (<i>kantittan</i>)	from where
<i>kajdiētten</i>	from where, from which direction
<i>kas</i>	how many
<i>togo</i>	why
<i>töhö</i>	how much, how many

Chart 24 shows that many interrogative pronouns are formed from the interrogative stem *kan-* ~ *kan'-* ~ *kaj-*. In many cases, the formation is synchronically opaque. Still, especially the locative interrogative pronouns are pretty transparent: *kanna* contains the old locative suffix *-DA, and *kantan* includes the ablative suffix -(t)tAn. The items *kajdiēk* and *kajdiētten* result from the amalgamation of the interrogative stem and the postposition *diēk* 'towards', whereby *kajdiētten* again exhibits the ablative suffix -(t)tAn.

As for their syntax, the interrogative pronouns occur in content questions asking for a single constituent of the clause. The syntax of content questions is discussed in detail in Section 8.4.2.2. Here, it shall only be mentioned that interrogative pronouns can fulfil any syntactic function. Additionally, interrogative pronouns can but need not be combined with the interrogative clitic =(I)j.

Seldom, =(I)j is even directly attached to the interrogative pronoun if it is the predicate of the clause (66). More often, =(I)j is only added to the verbal predicate of the clause (67) or is absent at all (68).

- (66) *Hürekte:-bit-e, d-i-gin, oččogo törö:-büt*
 baptize-PST2-3SG say-PRS-2SG then give.birth-PTCP.PST
te:te-ŋ ke kim=ij, törö:-büt inn'e-ŋ?
 father-POSS.2SG PTCL **who=Q** give.birth-PTCP.PST mother-POSS.2SG
 'He baptized you, you say, who is your natural father, your natural mother?'
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.004)

- (67) *Kim bihiē-ke kömöölöh-üög-e=j?*
 who 1PL.PRO-DAT/LOC **help-FUT-3SG=Q**
 'Who will help us?'
 (PoNA_19900810_TripToVoloChanka_nar.127)

- (68) *Kim eniē-ke ah-i belenn-ir?*
 who 2SG.PRO-DAT/LOC food-ACC prepare-PRS.3SG
 'Who prepares food for you?'
 (PoNA_19900810_TripToVoloChanka_nar.037)

Finally, a particular function of the interrogative pronoun *kim* 'who' (and very rarely also *tüök* 'what') deserves mention. In spoken language, they can be used as placeholder items (see Däbritz 2018a), as elements that replace an entire noun phrase in the case of uncertainty, hesitation, false starts, or the like. The "right" noun phrase is then often repeated later in the clause. In such contexts, *kim* copies the morphology of the noun phrase, which it replaces (Däbritz 2018a: 291), as seen in examples (69) and (70).

- (69) *Dom_tvorč'estva-ga manna min biēr-bit-im*
 house.of.arts-DAT/LOC hither 1SG.PRO give-PST2-1SG
kim-min, hantap-pin, [...].
who.PH-POSS.1SG.ACC parka-POSS.1SG.ACC
 'To the house of arts here, I gave a whatchamacallit, a parka, [this year I sewed a parka].'
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.090)

- (70) *Onton kim, vi:bar buōl-ar-i-gar kim-ner*
 then **who.PH** election be-PTCP.PRS-POSS.3SG-DAT/LOC **who.PH-PL**
kel-bit-ter onno, vi:bar-dat-ar kam'is's'ija-lar.
 come-PST2-3PL thither election-VBZ.CAUS-PTCP.PRS commission-PL
 'Then whatchamacallit, when the elections took place, whatchamacallit
 came there, the electoral commissions.'
 (BeES_1997_HistoryOfKatyryk_nar.087)

This function of *kim* 'who' is discussed in detail in Section 10.4 in the context of other placeholder items.

3.3.2.5 Indefinite Pronouns

Indefinite pronouns are derived from interrogative pronouns by adding the particles *ere* ~ *ire*, *eme* ~ *emete* and *da:* ~ *da* to the respective interrogative pronoun. The distribution and functional domains of the named particles are not fully understood yet, but some tendencies can nevertheless be described. First of all, the variant *ire* is used exclusively in Upper Dolgan according to the material analyzed and native speakers (Anna Barbolina, p.c.). Second, specificity appears to play a role to a certain extent, whereby *ere* ~ *ire* as a tendency forms specific indefinites, and *eme* ~ *emete*, as well as *da* ~ *da:*, form non-specific indefinites. In example (71), the speaker describes a picture in which a child is seen that looks somewhere. Therefore, the speaker concludes that the child must have seen something but does not know what; nevertheless, this is a specific referent. In example (72), in turn, the speaker poses an open question whether the person asked about is doing anything, leaving even the option that they are doing nothing. Therefore, the expression is non-specific. Moreover, in example (73), the speaker expresses that it is irrelevant who a person might be, whence the referent is non-specific again.

- (71) *Tug-u ere kör-büt di:*
what-ACC INDF see-PST2.3SG EMPH
 'It saw something, though.'
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.101)
- (72) *Iti d'ie-ti-ger tug-u eme gin-a:čči?*
 this house-POSS.3SG-DAT/LOC **what-ACC INDF** do-HAB.3SG
 'Does he do anything at home?'
 (KiMN_19900417_Milkmaid_flk.009)

- (73) *On-tu-ŋ kim da buōl-lun, [...].*
 that-POSS.3SG-POSS.2SG **who** **INDF** be-IMP.3SG
 'Whoever this might be, [...].'
 (PoNA_AkPG_1994_MPXarlampiev_nar.PoNA.044)

In many cases, however, such a fine-grained distinction cannot be shown or is not relevant in the given context. So, there are also quite many instances that contradict the assumption of specificity playing a role in the distinction of different indefinite pronouns. In example (74), the speaker evidently knows what he will show. Thus, the referent cannot be non-specific, but the particle *eme* is used nonetheless. The same is true in example (75), as the speaker talks to a group of people who form a set of referents. One of them can thus not be non-specific, even if the speaker does not know who this person is. The other way round, in examples (76) and (77), the particle *ere* is used, although the referents cannot be interpreted as specific. This constraint is most apparent in example (76) since the clause is an open question, and the speaker does not even know whether the hearer has gone somewhere at all.

- (74) *Min kiniler-ge tug-u eme köllör-ûō-m,*
 1SG.PRO 3PL.PRO-DAT/LOC **what-ACC** **INDF** show-FUT-1SG
ki:r-s-er.
 go.in-COOP-FUT.IMP.2SG
 'I will show them something, go in there [with them].'
 (PoMA_1964_IronCapBonyBelt_flk.096)
- (75) *Kannuk-kut emete buōpsu urduh-a huōk buōl-ûōg-a.*
which-POSS.2PL **INDF** at.all descendant-POSS NEG be-FUT-3SG
 'Some/one of you will have no descendants at all.'
 (BeAM_199X_LegendSpiritOfTrees_nar.239)
- (76) *Ehigi ûōren-e, kanna ere ûōren-e bar-a:ččī*
 2PL.PRO study-CVB.SIM **where** **INDF** study-CVB.SIM go-PTCP.HAB
e-ti-git duō?
 AUX-PST1-2PL Q
 'You for studying, did you go somewhere for studying?'
 (BeEI_KuNS_1998_Teacher_conv.KuNS.037)
- (77) *Kün aji tūōk ere haŋa hübe taks-ar.*
 day every **what** **INDF** new advice go.out-PRS.3SG
 'Every day, some new order is coming.'
 (PoNA_19910207_Fishing_nar.097)

Hence, the particles *ere* ~ *ire*, *eme* ~ *emete*, and *da* ~ *da:* all form indefinite pronouns in Dolgan. The former particle forms slightly more frequently specific indefinites, whereas the latter two particles more often form non-specific indefinites. However, this is more a tendency than a strict rule, and much variation can be observed.

3.3.2.6 Negative Polarity Items

Negative polarity items express negative polarity but do not carry intrinsic negative semantics. Negative polarity items are formed by combining interrogative pronouns with the particle *da* ~ *da:* in Dolgan, i.e. exactly like one of the non-specific indefinite pronouns. However, to function as a negative indefinite pronoun, the negative polarity item must be supported by a negative predicate in the clause, as in examples (78) and (79). Without the negative predicate, *kim da* 'nobody [lit. anybody]' and *tu:gu da* 'nothing [lit. anything]', respectively, would function as usual affirmative indefinite pronouns (see also Siegl (2020: 267–269)).

Coming to the function of negative polarity items, they express the negation of the semantic category referred to with the interrogative pronoun: Thus, *kim da* states that there is no animate entity that is allowed to be present in example (78), and *tu:gu da* states that there is nothing that the speaker can do in example (79).

(78) *Kim da huōk buōl-uōk-ta:k*, [...].

who INDF NEG.EX be-FUT-NEC.3SG

'Nobody may be there, [only the midwife and the woman giving birth are allowed to be there].'

(SuAA_20XX_Birth_nar.028)

(79) *Ani tu:g-u da gin-a kop-pop-pun.*

now **what-ACC INDF make-CVB.SIM make.it-NEG.PRS-1SG**

'Now, I am not able to do anything.'

(KiPP_NN2_2009_Clothes_nar.KiPP.007)

3.4 Numerals and Quantifiers

Numerals and quantifiers share the property of expressing the number of entities referred to (Lyons 1977: 454–460). Whereas numerals usually point to the exact number of referents, other quantifiers like *some* or *all* are less precise in this respect but express other semantic aspects of quantification. There are

many kinds of numerals of Dolgan, all of them are dealt with separately due to their divergent functional domains: Cardinal numerals (3.4.1), ordinal numerals (3.4.2), distributive numerals (3.4.3), collective numerals (3.4.4), approximative numerals (3.4.5), and limitative numerals (3.4.6). After that, quantifiers will be dealt with in detail (Section 3.4.7).

3.4.1 *Cardinal Numerals*

Cardinal numerals express the exact number of referents referred to with a given linguistic expression. The cardinal numerals in Dolgan are organized highly systematically in a decimal system. There are the simplex numerals from ‘1’ to ‘10’, ‘100’ and ‘1000’, the latter being a Russian loanword. The other numerals are formed from the base ‘10’ by multiplying or adding up. Only the numerals ‘20’ and ‘30’ display irregularities since they are not the products of ‘10’ and ‘2’ and ‘10’ and ‘3’, respectively, but independent stems. Finally, compounded numerals form one phonetic word so that consonant assimilations, intervocalic voicing, and the debuccalization *s > h* may occur in the forms, like in the numerals ‘40’, ‘50’, ‘80’ and ‘90’. Chart 25 lists the most salient cardinal numerals in Dolgan.

Syntactically, cardinal numerals behave either like adjectives (when used as a modifier) or nouns (when used independently). In the former case, they do not agree with their head noun, nor do they govern a particular form of the head noun ((80) and (81)). Däbritz (2021b) could show that these forms are underspecified for the number category since the numeral itself carries number semantics: The numeral ‘1’ is inherently singular, and numerals greater than ‘1’ are inherently plural.

- (80) *Bir ogo-m buollagina agis ij-da:k e-t-e.*
 one child-POSS.1SG though eight month-PROPR be-PST1-3SG
 ‘One of my children was eight months old, though.’
 (AnIM_2009_Accident_nar.004)

- (81) *Uon hette d'il-i kas's'ir-da:bit-a.*
 ten seven year-ACC cashier-VBZ-PST2-3SG
 ‘He worked 17 years as a cashier.’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.034)

When cardinal numerals function as nouns in a clause, they may be inflected for case and possession, but not for number, as their inherent semantics already include quantification. As for number agreement, the predicate of the clause can exhibit either singular (82) or plural (83) number reference when the subject of the clause is modified by a numeral greater than ‘1’.

CHART 25 Cardinal numerals

1	<i>bir</i>
2	<i>ikki</i>
3	<i>üs</i>
4	<i>tüört</i>
5	<i>bies</i>
6	<i>alta</i>
7	<i>hette</i>
8	<i>agis</i>
9	<i>togus</i>
10	<i>uon</i>
11	<i>uon bir</i>
20	<i>hü:rbe</i>
30	<i>otut</i>
40	<i>tüörd uon</i> (< <i>tüört uon</i>)
50	<i>bieh uon</i> (< <i>bies uon</i>)
60	<i>alta uon</i>
70	<i>hette uon</i>
80	<i>agih uon</i> (< <i>agis uon</i>)
90	<i>toguh uon</i> (< <i>togus uon</i>)
100	<i>hüs</i>
101	<i>hüs bir</i>
200	<i>ikki hüs</i>
1000	<i>ti:hičča</i>

- (82) *Talak-tar ejmeñn-i:l-ler tiäl-tan, ikki talak kamna:-bat.*
 bush-PL move-PRS-3PL wind-ABL **two** bush move-NEG.PRS.3SG
 'The bushes are moving because of the wind, but two bushes are not moving.'
 (AkEE_19900810_ReindeerMouse_flk.011)
- (83) *Tij-bit-tere, hette uraha d'ie tur-al-lar.*
 reach-PST2-3PL **seven pole** house stand-PRS-3PL
 'They came there, and seven pole tents are standing there.'
 (ChPK_1970_Nganasan_flk.037)

Cardinal numerals are used frequently and regularly in Dolgan speech. Even high numerals, e.g. in years or dates, are most often pronounced in Dolgan, the

speaker not switching to Russian (84). A peculiarity of expressing years in Dolgan is that the propriative suffix -LA:K is added to the cardinal numeral (85) or the lexeme *d'il* 'year' itself (86).

- (84) *S'idar Al'eks'ejev'ič', ol uōn agis ti:hičča kuraja taba ol*
 Sidor Alekseevich that **ten eight thousand** around reindeer that
kajdiēt "eh-ilin-n-e", kajdiēk bar-bit-a=j?
 whither throw-PASS-PST1-3SG whither go-PST2-3SG=Q
 'Sidor Alekseevich, around 18,000 reindeer, where were they "thrown away", where did they go?'
 (ChSA_KuNS_2004_ReindeerHerding_conv.KuNS.006)

- (85) *Minigi-n manna, Dud'inka-ga biēh-uōn agis-ta:k*
 1SG.PRO-ACC hither Dudinka-DAT/LOC **five-ten eight-PROPR**
d'il-ga pekar'-ga ūōret-e i:p-pit-a.
 year-DAT/LOC baker-DAT/LOC learn-CVB.SIM send-PST2-3SG
 'He sent me here, to Dudinka in [19]58 to train as a baker.'
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.018)

- (86) *Min seri:-ge bar-bit-im beje-m sana:-bi-nan*
 1SG.PRO war-DAT/LOC go-PST2-1SG self-POSS.1SG wish-POSS.1SG-INS
ti:hičča togus sü:s tūōrd-uōn bi:r d'il-la:k-ka.
thousand nine hundred four-ten one year-PROPR-DAT/LOC
 'I went to war voluntarily in 1941.'
 (MiXS_1967_SoldierInSecondWorldWar_nar.001)

3.4.2 Ordinal Numerals

Ordinal numerals express the place of a given referent within a line of similar referents. In Dolgan, ordinal numerals are formed by adding the suffix -Is to the respective cardinal numeral. The only exception from this pattern is the ordinal numeral expressing 'first'. Instead of the paradigmatically expectable **bi:ris*, either *maṇnajgi* or *pīerbej* ~ *p'ervej* is used. Nonetheless, in the case of compound numbers such as '21', '31' and so on, the correlating ordinal numerals are *hürbe bi:ris*, *otut bi:ris* et cetera (Nina Kudrjakova, p.c.). The named item *maṇnajgi* is an adjectivization (suffix -GI) of *maṇnaj* 'beginning; at first', which is a Mongolic loanword (Kałużyński 1961: 15, 57). In contrast, *pīerbej* ~ *p'ervej* is a Russian loanword (< Russian *pervyj* 'id.'). The inherited item *bastaki*, ultimately an adjectivization of *bas* 'head' and frequent in Sakha (Ubrjatova et al. 1982: 180), rarely occurs in Dolgan.

The attachment of the suffix -Is leads to several morphonological alternations within the stems of the numerals. In the case of *tördüs* 'fourth' (< *tūōrt*

‘four’), *behis* ‘fifth’ (< *bîes* ‘five’) and *onus* ‘tenth’ (< *ûon* ‘ten’), the diphthong in the stem changes into a short open monophthong. As described in Section 2.1, diphthongs in Dolgan trace back to either long vowels or vowel combinations arising from the intervocalic loss of consonants. Most modern Turkic languages have lost distinctive vowel quantity. However, since the distantly related Dolgan, Sakha, Khalaj, and Turkmen languages preserve this distinction synchronically, it seems reasonable to trace distinctive vowel quantity to Proto-Turkic (Johanson 2021: 329). The Turkmen cognates of the numerals important here are *dört*, *büş* and *on*, going back to the reconstructed Proto-Turkic forms **tört*, **büš* ~ **büš³* and **on* (Tenišev 1988: 166–172). This, in turn, implies that the cardinal numerals in Dolgan show the diachronically expected reflexes, whereas the ordinal numerals do not. Possibly, this can be explained by assuming that diphthongization only took place in stressed positions. The latter is the case in *tüört*, *bîes* and *ûon*, but not in *tördüs*, *behis* and *onus* (see Section 2.4.1 for suprasegmental phonology). As the grammar at hand is a synchronic one, it does not aim at finally explaining the mechanisms of diphthongization in Dolgan; nonetheless, it shall be pointed out that the derivation of ordinal numerals is essential for this issue. Moreover, the forms *aksis* ‘eight’ (< *agis* ‘eight’) and *toksus* ‘ninth’ (< *togus* ‘nine’) show vowel syncope in the second syllable. The ordinal numerals of the first decade and ‘hundred’ are displayed in Chart 26.

Syntactically, ordinal numerals behave like adjectives, i.e. they modify nouns. The examples (87) and (88) show ordinal numerals in Dolgan.

- (87) *Pierbej ogo-m munna bar.*

first child-POSS.1SG here EX

‘My first child is here.’

(KiPP_NN2_2009_Family_nar.KiPP.034)

- (88) *Onton beh-is du:, hett-is du: kün-ü-ger*

then five-ORD Q seven-ORD Q day-POSS.3SG-DAT/LOC

kin-e tüh-er.

navel-POSS.3SG drop-PRS.3SG

‘Then, at the fifth or seventh day, the navel drops off.’

(SuAA_20XX_NameGiving_nar.002)

3 The issue of voicedness of the word-initial labial stops in Proto-Turkic shall not be discussed here, as it is irrelevant for the point made. See, e.g. Johanson (2021: 355–358) for details.

CHART 26 Ordinal numerals

Number	Cardinal numeral	Ordinal numeral
1	<i>bir</i>	<i>maɣnajgi ~ p̄ierbej ~ p'ervej</i>
2	<i>ikki</i>	<i>ikkis</i>
3	<i>üs</i>	<i>ühüs</i>
4	<i>tüört</i>	<i>tördüs</i>
5	<i>bies</i>	<i>behis</i>
6	<i>alta</i>	<i>altis</i>
7	<i>hette</i>	<i>hettis</i>
8	<i>agis</i>	<i>aksis</i>
9	<i>togus</i>	<i>toksus</i>
10	<i>uon</i>	<i>onus</i>
100	<i>hüs</i>	<i>hü:hüs</i>

3.4.3 Distributive Numerals

Distributive numerals express the distribution of a particular but always an equal number of referents, the English translational equivalent being “x each”. In Dolgan, distributive numerals are formed by adding the suffix *-LI* to the respective cardinal numeral. The usual morphonological processes apply; however, in contrast to ordinal numerals, diphthongs in the stems of distributive numerals are not monophthongized. Chart 27 displays the distributive numerals of the first decade and ‘hundred’.

The examples (89) to (91) show the usage of distributive numerals in Dolgan. Note that the distributive numeral *bir:rdi* ‘one each’ can also mean ‘separately’ (91).

- (89) [...], *kaɣas diēk, uɣa diēk emiē ikki-li: kihi.*
left to right to also **two-DISTR** human
‘[There are two people in the front], on the left and the right also two people on each side.’
(ChVD_AkEE_198204_SoldierInWar_nar.ChVD.050)

- (90) *Agis-ti-togus-tu: ča:h-i köh-öl-lör, [...].*
eight-DISTR-nine-DISTR hour-ACC nomadize-PRS-3PL
‘Eight, nine hours they nomadize each [day], [because the reindeer move slowly, the mounds of the tundra, in the swamps and so on].’
(ErTS_AkPG_1994_AAPopov_nar.ErTS.060)

- (91) *Eme:ksit-ter-i b̥i:r-di: boskolo:-but-tar.*
old.woman-PL-ACC **one-DISTR** free-PST2-3PL
'They freed the old women separately.'
(PoNA_1970_NeverSeenBird_nar.057)

CHART 27 Distributive numerals

Number	Cardinal numeral	Distributive numeral
1	<i>b̥i:r</i>	<i>b̥i:r-di:</i>
2	<i>ikki</i>	<i>ikkili:</i>
3	<i>üs</i>	<i>üstü:</i>
4	<i>tüört</i>	<i>tüörtü: ~ tüördü:</i>
5	<i>b̥ies</i>	<i>b̥iesti:</i>
6	<i>alta</i>	<i>altali:</i>
7	<i>hette</i>	<i>hetteli:</i>
8	<i>agis</i>	<i>agisti:</i>
9	<i>togus</i>	<i>togustu:</i>
10	<i>uon</i>	<i>uonnu:</i>
100	<i>hü:s</i>	<i>hü:stü:</i>

3.4.4 *Collective Numerals*

Collective numerals refer to a group of a certain amount of referents. In Dolgan, they are formed by adding the suffix *-IAn* to the respective cardinal numeral. This leads to the usual morphonological alternations. Moreover, also in the case of collective numerals, the monophthongization and shortening of stem diphthongs can be observed. The collective numerals of the first decade and ‘hundred’ are displayed in Chart 28.

As seen in the chart, the collective numeral **b̥iriēn* (< *b̥i:r* ‘one’) does not occur. This is clearly due to semantic reasons since the notion of collectivity contradicts the semantics of the numeral ‘1’. Syntactically, collective numerals can either function as adverbs (‘in a group of x’) (92) or, when suffixed with possessive suffixes, as nouns in argument position (93).

- (92) *Ani ikk-iēn bar-iāk-pit.*
now **two-COLL** go-FUT-1PL
'Now we will go as a pair [= in a group of two].'
(PoNA_19900322_PoorBoyDevil_flk.101)

- (93) *Mm, kird'-a-bit, ikk-îem-mit kirij-di-bit.*
hm age-PRS-1PL two-COLL-POSS.1PL age-PST1-1PL
'Mm, we are getting older; both of us have grown old.'
(ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.025)

CHART 28 Collective numerals

Number	Cardinal numeral	Collective numeral
1	<i>bî:r</i>	---
2	<i>ikki</i>	<i>ikkîen</i>
3	<i>üs</i>	<i>ühûön</i>
4	<i>tüört</i>	<i>tördüön</i>
5	<i>bîes</i>	<i>behîen</i>
6	<i>alta</i>	<i>altîan</i>
7	<i>hette</i>	<i>hettîen</i>
8	<i>agis</i>	<i>aksîan</i>
9	<i>togus</i>	<i>toksûön</i>
10	<i>ûön</i>	<i>onûön</i>
100	<i>hü:s</i>	<i>hü:hûön</i>

3.4.5 *Approximative Numerals*

Approximative numerals refer to a roughly estimated number of referents. In Dolgan, approximative numerals are formed by adding the suffix -(č)čA to the respective cardinal numeral. According to Ubrjatova (1985: 137), the suffix is attached only to round numbers; the material analyzed here does support this claim. Additionally, an acceptability task with a native speaker also yielded a clear preference for round numbers. This tendency adheres to the semantics expressed by approximative numerals since their function is to express an estimated number of referents. As a perspective for further research, systematic acceptability tasks with native speakers would be desirable to account more precisely for the conceptualization of enumeration and approximation by speakers of Dolgan. Syntactically, approximative numerals behave similarly to cardinal numerals. Examples (94) and (95) show two instances of approximate numerals.

- (94) *Ūon-ča kihi bar-an bilər öl-büt d'on-u*
ten-APRX human go-CVB.SEQ long.ago die-PTCP.PST people-ACC
it-iäl-i:l-lar.
 shoot-ITER-PRS-3PL
 'About ten men went and shot at the people, who had died long ago.'
 (SaSS_1964_NganasanBraveBoy_flk.098)
- (95) *He:, alta ūon-ča ogo e-t-e.*
AFF six ten-APRX child be-PST1-3SG
 'Yes, it was approximately 60 children.'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.121)

3.4.6 Limitative Numerals

Limitative numerals refer to a group of referents limited to a certain amount of referents, the English translation equivalent being 'only x'. They are formed by adding the suffix -IAjAk to the respective cardinal numeral and cause the expected morphonological alternations. Like in the case of ordinal numerals, the forms relating to '4', '5' and '10' show the monophthongization of the diphthong in the first syllable. The limitative numerals of the first decade and 'hundred' are displayed in Chart 29.

Although theoretically, there are no constraints to building limitative numerals, they rarely occur in Dolgan speech. The analyzed material exhibits only instances of *ikkiejek* 'only two' (96) and *ühüöjek* 'only three' (97).

- (96) [...], *de-h-is-pit-ter* *ikk-iejek-ke:n.*
 say-COOP-RECP-PST2-3PL **two-LIM-DIM**
 '["Well, let us stop forging"], the two of them said only to each other.'
 (BeAM_199X_HumanInLandOfDeath_flk.037)
- (97) *In'e-biti-tten* *üh-üöjek, üs ogo-lo:k e-t-e*
 mother-POSS.1PL-ABL **three-LIM** three child-PROPR be-PST1-3SG
in'e-bit, aga-bit bihiene.
 mother-POSS.1PL father-POSS.1PL our
 'From our mother, there is only three, she had three children, our mother, our father.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.020)

As shown in example (96), the limitative numeral can be extended with the diminutive suffix -kA:N. According to Artem'ev (2013b: 134), this occurs frequently but not obligatorily, intensifying the limitative meaning. Given the low

CHART 29 Limitative numerals

Number	Cardinal numeral	Limitative numeral
1	<i>bir</i>	<i>bir:riejek</i>
2	<i>ikki</i>	<i>ikkiejek</i>
3	<i>üs</i>	<i>ühüöjek</i>
4	<i>tüört</i>	<i>tördüöjek</i>
5	<i>bies</i>	<i>behiejek</i>
6	<i>alta</i>	<i>altiajak</i>
7	<i>hette</i>	<i>hettiejek</i>
8	<i>agis</i>	<i>akstajak</i>
9	<i>togus</i>	<i>toksüöjak</i>
10	<i>üön</i>	<i>onüöjak</i>
100	<i>hü:s</i>	<i>hü:hüöjek</i>

overall number of instances in the INEL Dolgan Corpus, no solid empirical analysis can be provided here for this phenomenon. However, the combination of a limitative and diminutive marker appears to be well compatible from a semantic point of view.

3.4.7 Quantifiers

Quantifiers are modifiers of nouns that determine the latter in terms of the number of referents included in a set (Lyons 1977: 455). In contrast to numerals, quantifiers do not refer to an exact amount of referents. Therefore, they can also refer to uncountable referents. Dolgan exhibits a handful of different quantifiers, which can be divided into three groups: Scalar quantifiers range in a given amount on a scale, predicating that it is big or small. Existential quantifiers predicate that there are applicable referents, without evaluating their amount. Universal quantifiers, finally, predicate that a certain proposition holds for all applicable referents. Chart 30 shows the Dolgan quantifiers and their English translational equivalents.

The scalar quantifiers *agijak* and *hiése* refer to a small number of referents, whereby *agijak* often has a negative connotation compared to *hiése*. In example (98), the speaker regrets that only a few people stayed in a particular settlement, whereas in example (99), this negative connotation is not intended.

CHART 30 Quantifiers

Quantifier	Meaning
Scalar	
<i>agɨjak</i>	few, little
<i>hîese</i>	a bit, a little
<i>elbek</i>	many, much
<i>ügüs</i>	many, much
<i>töhölö:k</i>	so many, so much
Existential	
<i>kahûon</i>	some
<i>kas da: ~ kas da</i>	some
<i>kas eme ~ kas emete</i>	some
<i>kas ere ~ kas ire</i>	some
Universal	
<i>bari ~ barita</i>	every, all

- (98) [...], *ani saps'em agɨjak kihi ka:l-bit*.
 now at.all few human stay-PST2.3SG
 '[All people went away], now there stayed very few people at all.'
 (PoPD_KuNS_2004_Life_conv.PoPD.129)

- (99) *Kihi-ler-iŋ hîese ah-i tûog-u*
 human-PL-POSS.2SG a.little food-ACC what-ACC
trudan'î:lari-gar [... ilin-ar e-ti-lere buô.
 work.day-POSS.3PL-DAT/LOC buy-PTCP.PRS AUX-PST1-3PL PTCL
 'The people bought a bit of food or so with their daily salary, [different things and clothes].'
 (BeES_1997_HistoryOfKatyryk_nar.083)

Elbek and *ügüs*, in turn, refer to a large number of referents. They can be used interchangeably: In examples (100) and (101), the count noun *kihi* 'human' is quantified by *elbek* and *ügüs*, respectively, whereas in examples (102) and (103), the mass noun *karči* 'money' is quantified with the same quantifiers. The interchangeability can maybe be explained by *elbek* being a Mongolic loanword borrowed into Pre-Sakha-Dolgan in addition to the inherited *ügüs*.

- (100) *Kihi üösk-üög-e munna elbek kihi olor-üög-a.*
 human be.born-FUT-3SG here many human live-FUT-3SG
 ‘People will be born, and many people will live here.’
 (KiPP_2009_Syndassko_nar.018)
- (101) [...], *ügüs kihi e-t-e oččogo.*
 many human be-PST1-3SG then
 ‘[In Potapovo, it was also good then], there were many people then.’
 (SuON_KuNS_19990303_HardLife_conv.SuON.078)
- (102) [...], *olus da elbek karči-ni ölö-r-üö-ŋ huög-a ol*
 very EMPH much money-ACC gain-FUT-2SG NEG-3SG that
tuh-u-gar, [...].
 side-POSS.3SG- LOC
 ‘[Even if you kill fifty reindeer], you will not gain very much money out
 of it, [or nomadizing in the tundra].’
 (UkOA_KuNS_20XX_LifeNovorybnoe_conv.UkOA.042)
- (103) *Taba-hit-tar-ga ügüs karči-ni tölö:-ŋ.*
 reindeer-AGN-PL-DAT/LOC much money-ACC pay-IMP.2PL
 ‘Pay much money to the reindeer herders.’
 (ChSA_KuNS_2004_ReindeerHerding_conv.KuNS.010)

Töhölö:k is a combination of the interrogative pronoun *töhö* ‘how many; how much’ with the propriative suffix -LA:K. Like *töhö*, it can modify both countable and uncountable nouns. It refers to a large number of referents, whereby it often concomitantly expresses the speaker’s surprise or amazement.

- (104) *Töhölö:k da sta:da e-t-e, ibij, ibij, ile.*
 so.many EMPH herd be-PST1-3SG oh.dear oh.dear indeed
 ‘It was so many herds, oh dear, indeed.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.100)

The existential quantifiers *kahuôn*, *kas da: ~ kas da*, *kas eme ~ kas emete* and *kas ere ~ kas ire* are all formed from the interrogative pronoun *kas* ‘how many’ (see Section 3.3.2.4). *Kahuôn* is formed with the suffix of collective numerals -IAn (see Section 3.4.4); the other three forms use the particles *da: ~ da*, *eme ~ emete* and *ere ~ ire*, which form indefinite pronouns (see Section 3.3.2.5). Since *kas* only asks for countable referents, also the derived quantifiers refer solely to countable entities.

- (105) *Kahuōn kūn-ū tīāh-i: hild'i-bit-tar, [...].*
 some day-ACC make.noise-CVB.SIM go.AUX-PST2-3PL
 'They made noise for some days, [on the third day they fell silent].'
 (PoNA_19900322_PoorBoyDevil_flk.174)

The universal quantifier *bari* ~ *barita* 'all; every' is the most complex quantifier in Dolgan concerning its morphosyntactic behaviour since it can be placed after the noun it modifies. The form *barita* is derived from *bari*, namely by adding the third-person singular possessive suffix -(t)A. Siegl (2018: 17–18) convincingly shows that -(t)A has to be analyzed this way and cannot be the homonymous multiplicative suffix since in oblique cases, the form is, e.g. *bari-tin* 'all-POSS.3SG.ACC'. Another argument favouring this analysis is that there are also instances of *bari-lara* 'all-POSS.3PL' (see below).

Both *bari* and *barita* have the meaning of 'every' and 'all'. Hence, they do not distinguish between distributive and collective readings (Siegl 2018: 28): In example (106), individual persons are referred to, whereas in example (107), the people as a collective is referred to.

- (106) *Bari kihi-ler kūrt-el-ler ebit d'arapala:n-i.*
 all human-PL wait-PRS-3PL EVID airplane-ACC
 'All people are apparently waiting for the aircraft.'
 (PoNA_19900810_Tojo00Airplane_nar.006)
- (107) *Bar buōl-lun sirdik, kūn-ne:k olok bari joŋ-ŋo.*
 EX be-IMP.3SG bright sun-PROPR life all people-DAT/LOC
 'May there be a bright and sunny life for the whole people.'
 (MiXS_1967_SoldierInSecondWorldWar_nar.082)

Bari and *barita* occur in different positions with respect to the modified noun: The former occurs before the modified noun, the latter follows after it. Preposed *bari* does not agree with the modified noun in case, but the latter does (Siegl 2018: 3). As for the number of the head noun, Siegl (2018: 27) assumes that prenominal *bari* calls obligatorily for plural marking. However, the material analyzed here shows that both forms underspecified for number and plural forms do occur. The syntactic properties of *bari* and *barita* are discussed in detail in Section 7.1.2.5.2.

Functionally, *bari* and *barita* show no apparent differences. The examples (108) and (109) can be analyzed similarly to (106) and (107), example (108) having a distributive reading and example (109) having a collective reading.

- (108) *Kös bari-ta bar-an ka:l-bit.*
 nomad all-POSS.3SG go-CVB.SEQ stay.AUX-PST2.3SG
 ‘All the nomads went off.’
 (PoKK_1964_TwoOrphanBoys_flk.112)
- (109) [...] *min as-pin bari-tin*
 1SG.PRO food-POSS.1SG.ACC all-POSS.3SG.ACC
h-îep-pin bagar-bap-pin.
 eat-PTCP.FUT-POSS.1SG.ACC want-NEG.PRS-1SG
 ‘[Hunting for yourself], I do not want to eat up all my food.’
 (MiPP_1996_OldManButterfly_flk.021)

Additionally, the usage of *bari* and *barita* seems to be one of the few morpho-syntactic features distinguishing Upper from Lower Dolgan varieties. In Upper Dolgan, both prenominal *bari* and postnominal *barita* occur. In Lower Dolgan, in turn, only the latter pattern is used according to the material analyzed here. Since there are more than 50 instances of *bari* from speakers of Upper Dolgan and no instance from speakers of Lower Dolgan, this is seemingly no coincidence.

3.5 Verbs

Verbs prototypically denote events and function mainly as the predicate of the clause. Whenever talking about the semantics of verbs, I use the term *event* according to Davidson (1967, 1980). Only when explicitly referring to predications of state, I use the term *state* since it is unsettled in formal semantics whether these can be analyzed applying Davidson’s event semantics or not (Maienborn 2012: 818–822). In Dolgan, verbs can be classified into the following categories, which are discussed in the next sections: full/lexical verbs (3.5.1), modal verbs (3.5.2), copula verbs (3.5.3), auxiliary verbs (3.5.4) and placeholder verbs (3.5.5). Verbs can be represented by underived stems, but they can also be derived from other verbs or other word classes. Sections 12.3 and 12.4 describe the derivation of verbs in detail. Verbs are inflected for person-number, tense, aspect, mood and evidentiality. Verbal inflectional morphology is discussed in Chapter 6.

3.5.1 Full/Lexical Verbs

Full/lexical verbs denote events, e.g. *bar-* ‘go’, *olor-* ‘sit (down); live’ or *bulta-* ‘hunt’, as does the verb *ogus-* ‘beat’ in example (110).

(110) *Bu ogonn'or-uy araj düñür ogus-t-a.*
this old.man-POSS.2SG suddenly shaman.drum beat-**PST1-3SG**
'This old man suddenly beat the shaman drum.'
(FeA_1931_OldManUkukuutFox_flk.042)

One short comment regarding the representation of verbs is in order here: The verb stem (homonymous with second person singular imperative affirmative) is taken as a reference form throughout this grammar. As can be seen from the verbs listed above, the Dolgan linguistic expression of the concept 'go' is, thus, referred to with *bar-*, the hyphen indicating that this is not an inflected form. The same notation is applied in the dictionaries of Stachowski (1993a, 1998). Aksënova et al. (1992) and Barbolina et al. (2019) also use the verb stem as the lexicon form but omit the hyphen in their notation.

3.5.2 *Modal Verbs*

Modal verbs are lexical expressions of the grammatical category of modality (Hengeveld 2004: 1192–1198). Since Dolgan exhibits various morphosyntactic means for expressing modality (see Section 6.5), there are only a few modal verbs in Dolgan.

CHART 31 Modal verbs

Verb	Modality	Further meaning
<i>bagar-</i>	volitive/desiderative	'love', 'like'
<i>gin-</i>	volitive/desiderative	'make'
<i>kiäj-</i>	ability	'win'
<i>hata:-</i>	ability	'try', 'do in vain'

As shown by Chart 31, the verbs *bagar-* and *gin-* express volitive/desiderative modality. The former is polysemous, meaning both 'love; like' and 'want' (Stachowski 1993a: 50). According to Jark (2018: 72–73), *bagar-* can function as a lexical verb, governing a direct object, and as a modal verb. In the latter case, the form of the depending main verb is the accusative case of the future participle (see Section 6.3.1.5), whereby person-number reference is established via possessive suffixes (Jark 2018: 79). Formally, the lexical verb occurs in a complement clause (see Section 9.3.1), whose subject can be co-referential to the subject of the matrix clause (111) but does not have to be (112) (Jark 2018: 79).

- (111) [...], *taba et-in h-îék-pin*
 reindeer meat-POSS.3SG.ACC eat-PTCP.FUT-POSS.1SG.ACC
bagar-a-bin.
 want-PRS-1SG
 ‘[I am used to reindeer meat], I want to eat reindeer meat.’
 (AkEE_19900810_PearlBeard_flk.077)
- (112) *Ol ihin kim da:gani ani seri-gin*
 that because who EMPH now war-POSS.2SG.ACC
bûôl-ûôg-un bagar-bat.
 become-PTCP.FUT-POSS.3SG.ACC want-NEG.PRS.3SG
 ‘Therefore, nobody wants now that war would come.’
 (MiXS_1967_SoldierInSecondWorldWar_nar.077)

The verb *gin-* is also polysemous, meaning both ‘make’ and ‘want’. It is noteworthy that its formal cognate in Sakha lacks the polysemy, but it is available again in farther related Southern Siberian Turkic languages (Räsänen 1969: 264a). In Dolgan, the modal verb *gin-* is combined with the purposive converb (see Section 6.3.2.6) of the lexical verb (Jark 2018: 81). Despite this formal pattern, it can be reasonably argued that the lexical verb does not form an adverbial purpose clause but a clause chain (see Section 9.1). One important argument for this analysis is that the first arguments of both verbs have to be co-referential (Jark 2018: 83).

- (113) *Ati:la:-ri gin-al-lar, îe?*
 sell-CVB.PURP want-PRS-3PL AFF
 ‘They want to sell [them], right?’
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.114)

Hence, Dolgan has two concurring modal verbs expressing volitive/desiderative modality. According to Jark (2018: 85), there are no significant differences in their usage; the data analyzed here supports this claim.

Two more modal verbs in Dolgan are *kiâj-* and *hata:-*, which express facultative modality, more precisely the (non-)ability of a referent to perform an action. The former lexeme is polysemous, meaning both ‘win’ and ‘can’ (Stachowski 1993a: 167). When used as a modal verb, that is, together with another lexical verb, *kiâj-* occurs exclusively in negative clauses. Thereby, the main verb is finite, carrying person-number as well as negation morphology, and *kiâj-* appears in the sequential converb form (see Section 6.3.2.1) *kiâjan*.

- (114) *D'e Öksökü ira:kta:gi-ni kîāj-an ip-pe-ti-bit.*
 well Öksökü czar-ACC can-CVB.SEQ feed-NEG-PST1-1PL
 'Well, we could not feed the czar Öksökü.'
 (ErSV_1964_WarBirdsAnimals_flk.205)

The functions of the verb *hata:-* are not fully understood yet. According to Stachowski (1993a: 98), two lexemes are amalgamated here: The first one would mean 'be able to; know', and the second one 'not manage; try (in vain); do in vain'. A comprehensive diachronic analysis goes far beyond the scope of this grammar and remains a task for further research. As for the functions of *hata:-* in Dolgan—be it one or two lexemes—they are manifold: First, it can mean 'try (in vain)'. Though the item is probably not a modal verb in the narrower sense in this domain, an example shall be given nonetheless.

- (115) *Dud'inka-ga egel-e hat-ir e-t-e?*
 Dudinka-DAT/LOC bring-CVB.SIM try-PTCP.PRS AUX-PST1-3SG
 'And he was trying to bring [it] to Dudinka?'
 (SuON_KuNS_19990303_HardLife_conv.KuNS.047)

Another usage of *hata:-*, which is not genuinely modal, is the following: It can occur in morphosyntactically affirmative clauses, combined with the simultaneous converb (see Section 6.3.2.2) of the lexical verb. Here, the semantics of *hata:-* is 'do in vain'.

- (116) *D'om-mun kördö-t-ö hata:-ti-m*
 people-POSS.1SG.ACC search-CAUS-CVB.SIM do.in.vain-PST1-1SG
da, kantan da bul-bat-tar.
 EMPH where.from INDF find-NEG.PRS-3PL
 'I made my people search [her] in vain, they do not find her anywhere.'
 (KiMN_19900417_Milkmaid_flk.204)

In truly modal contexts, *hata:-* often behaves like *kîāj-* from a morphosyntactic perspective: It occurs in the form of the sequential converb, and the main verb carries negative finite morphology.

- (117) *Če ogo-lor-go hata:-n buhar-bap-pin*
 well child-PL-DAT/LOC can-CVB.SEQ cook-NEG.PRS-1SG
d-i-bin.
 say-PRS-1SG
 'I cannot cook for the children, I say.'
 (KiES_KiLS_2009_Life_nar.KiES.012)

Nevertheless, in similar contexts, *hata:-* can also occur in—both affirmative (118) and negative (119)—finite forms, combined with the simultaneous converb of the main verb.

- (118) *Min Ki:ča: ki:h-im as-t-i: hat-ir,*
 1SG.PRO Kyyča daughter-POSS.1SG food-VBZ-CVB.SIM can-PRS.3SG
atag-i, tayah-i oŋor-o hat-ir.
 shoes-ACC clothes-ACC make-CVB.SIM can-PRS.3SG
 ‘My daughter Kyyča can cook, she can make shoes and clothes.’
 (PoNA_19900810_TripToVoloChanka_nar.040)

- (119) *Horok pastuk taba-ni da kölün-e*
 some shepherd reindeer-ACC EMPH harness-CVB.SIM
hata:-bat.
 can-NEG.PRS.3SG
 ‘Some shepherds cannot even harness reindeer.’
 (KiMN_1975_ReindeerHerding_nar.065)

To sum up, the few modal verbs in Dolgan are quite manifold regarding form and function, which are not fully understood yet and call for further research.

3.5.3 *Copula Verbs*

Copula verbs connect a subject and a non-verbal predicate, expressing person and number of the former. There are two copula verbs in Dolgan, *e- ~ er-* and *būl-*, differing in both form and function. As regards form, *būl-* exhibits all verb forms, whereas *e- ~ er-* occurs only in the affirmative past tenses of the indicative mood (*e-*) as well as in the conditional-temporal mood (*er-*) (see Chapter 6 for verbal inflection). Chart 32 summarizes the relevant domains of the copula verbs according to the material analyzed here.

The copula verb *e- ~ er-* expresses both permanent and impermanent states but never the change of a state. The variant *e-* occurs in the past tenses, and the variant *er-* appears in the conditional/temporal mood. In example (120), the former expresses an unchangeable property of the referents, i.e. a permanent state; in example (121), the occupation of the referent, i.e. an impermanent state, is described.

- (120) *Haka-lar e-ti-ler.*
 Dolgan-PL be-PST1-3PL
 ‘They were Dolgans.’
 (LaVN_KuNS_1999_MusicRepressions_conv.LaVN.053)

CHART 32 Formal domains of copula verbs

Form of the verb	<i>e- ~ er-</i>	<i>būōl-</i>
present tense	-	+
past tenses, affirmative	+	+
past tenses, negative	-	+
future tense	-	+
habitual	-	+
imperative mood	-	+
conditional/temporal mood	+	+
necessitative mood	-	+
participles	-	+
converbs	-	+

- (121) *Min zaat'exn'ik e-ti-m.*
 1SG.PRO zootechnician be-PST1-1SG
 'I was a zootechnician.'
 (PoPD_KuNS_2004_Life_conv.PoPD.026)

Example (122) shows the variant *er-* in a subordinate temporal clause, expressing an impermanent state.

- (122) *Küččügüj er-dek-pine būōllagına beje-m če*
 small be-TEMP-1SG though self-POSS.1SG well
kohuj-am-min ill-i:r e-ti-m.
 compose-CVB.SEQ-1SG sing-PTCP.PRS AUX-PST1-1SG
 'When I was young, though, I was composing and singing myself.'
 (ZhNA_KuNS_20XX_LifeAndMusic_conv.ZhNA.024)

The copula verb *būōl-* can also express permanent and impermanent states like in example (123), where the occupation of the referent, i.e. an impermanent state, is described. Note that this functional domain competes with the predicate form of nominals (see Sections 4.4 and 8.2) in the present tense, indicative mood.

- (123) *Urut taba üle-hit-e būōl-but-a.*
 earlier reindeer work-AGN-POSS.3SG be-PST2-3SG
 'Earlier, he was a reindeer worker.'
 (KiPP_NN2_2009_Family_nar.KiPP.055)

However, the copula verb *būōl-* much more often expresses the change of a state. This circumstance also explains its broader applicability regarding its form since, e.g. future tense or imperative mood forms at least implicitly convey a connotation of a changing state. The expression of the change of a state is illustrated by examples (124) and (125).

- (124) *U: bu:s būōl-but.*
 water ice become-PST2.3SG
 'The water became ice.'
 (AkEE_19900810_PearlBeard_flk.033)
- (125) *Dogot-tor-un kitta aragū-msak būōl-but.*
 friend-PL-POSS.3SG.ACC with alcohol-PHIL become-PST2.3SG
 'Together with his friends, he became a drunkard.'
 (UoPP_ChGS_20170724_SocCogRetell2_nar.UoPP.012)

To sum up, there are two copula verbs in Dolgan, *e- ~ er-* and *būōl-*. Both express permanent and impermanent states, and the latter often expresses the change of a state, too.

3.5.4 Auxiliary Verbs

Auxiliary verbs modify the grammatical meaning of another lexical verb, e.g. they may express tense, aspect, mood and evidentiality. Dolgan has a rich system of auxiliary verbs, typical for Turkic languages but indeed uncommon from a broader typological point of view. There are two groups of auxiliaries in Dolgan.

First, there are the auxiliary verbs *e-* and *būōl-*, which occur as copula verbs, too. The auxiliary *e-* is regularly involved in paradigm building of various verbal categories, with no lexical meaning anymore. So, it forms the tense-aspect forms pluperfect (6.4.2.4), past progressive (6.4.2.5), past habitual (6.4.6) and past abessive (6.4.8), as well as the counterfactual mood (6.5.5). Example (126) shows the auxiliary verb *e-* in the pluperfect tense, and example (127) shows it in the counterfactual mood.

- (126) *Ekzamen tup-pup-put, Jevdak'ija St'epanavna-ni kitta*
 exam hold-PST2-1PL Yevdokiya Stepanovna-ACC with
ikk-îem-mit bar-bit e-ti-bit.
 two-COLL-POSS.1PL go-PTCP.PST AUX-PST1-1PL
 'We passed a test, together with Yevdokiya Stepanovna I had gone [there].'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.006)

- (127) [...] *birgeh-e* *ani da: ülel-îek*
 one.of.two-POSS.3SG now EMPH **work-PTCP.FUT**
e-t-e *da masi:na-ta huök.*
AUX-PST1-3SG and car-POSS NEG.3SG
 '[...] the other one also would work, but he has no car.'
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.155)

The auxiliary verb *buöl-* is not regularly involved in paradigm building but can be combined with many participles. These are mostly the affirmative and negative present participle, but also the affirmative and negative postterminal past participle, and the future participle (see Section 6.3.1). In auxiliary verb constructions with *buöl-*, grammatical categories are expressed by the auxiliary, whereas the lexical meaning is conveyed by the main verb. In rare cases, the usage of the past or future participle of the main verb can also express tense. Thereby, the auxiliary does not entirely lose its semantics 'be; become'. Thus, it can express intraterminality, i.e. regarding an event within its applicable limits. Moreover, it can express either durative or inchoative actionality, whereby the former is nearly not distinguishable from intraterminal viewpoint aspect in this domain. Inchoative actionality is more frequently expressed than durative actionality, be it in the present (128) or past (129) tense.

- (128) *Bir ki:s-tan d'e arak-pat* *buöl-ar.*
 one girl-ABL well **separate-NEG.PTCP.PRS** **become.AUX-PRS.3SG**
 'So he starts following [lit. not separating from] one girl.'
 (BaRD_YaP_1930_HumanInAnotherWorld_flk.028)
- (129) *Onton, er-im* *aragi: ih-er*
 then husband-POSS.1SG alcohol **drink-PTCP.PRS**
buöl-but-a.
become.AUX-PST2-3SG
 'Then my husband started to drink alcohol.'
 (UoPP_ChGS_20170724_SocCogRetell2_nar.UoPP.011)

Since the auxiliary *e-* forms intraterminal past progressives (see Section 6.4.2.5), the expression of intraterminality with *buöl-* is constrained to present tense contexts like in example (130).

CHART 33 Auxiliary verbs in postverbal constructions

Verb	Lexical meaning	Tokens
<i>is-</i>	'go'	197
<i>ka:l-</i>	'stay'	191
<i>kebis- ~ ke:s-</i>	'throw'	174
<i>hirit-</i>	'go; walk'	144
<i>bar-</i>	'go'	118
<i>tur-</i>	'stand (up)'	108
<i>tus- ~ tüs-</i>	'fall'	94
<i>hit-</i>	'lie (down)'	92
<i>olor-</i>	'sit (down)'	74
<i>gin-</i>	'make'	45
<i>il-</i>	'take'	45
<i>kel-</i>	'come'	27
<i>bier-</i>	'give'	24
<i>tart-</i>	'pull'	12
<i>büt-</i>	'stop'	11
<i>ogus-</i>	'beat'	9
<i>kör-</i>	'see'	8
<i>tagis-</i>	'go out'	7
<i>his-</i>	'beat'	6
<i>it-</i>	'send'	6
<i>batta:-</i>	'pull down'	4
<i>egel-</i>	'bring'	3
<i>köt-</i>	'run'	2
<i>taha:r-</i>	'take out'	2
<i>tahij-</i>	'lash'	2
<i>birak-</i>	'throw'	1
<i>bis-</i>	'cut'	1
<i>hot-</i>	'wipe'	1
<i>ilin-</i>	'take away'	1
<i>ilt-</i>	'bring'	1
<i>kir-</i>	'go in'	1
<i>iksa:-</i>	'reach a limit'	1
<i>istan-</i>	'break'	1

- (130) *Horok-horok inčikt-ir buōl-ar.*
 some-some **moan-PTCP.PRS be.AUX-PRS.3SG**
 ‘Some [of the wounded soldiers] are moaning.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.121)

In addition to *e-* and *buōl-*, there are almost three dozens of verbs that can function as auxiliaries in some contexts. They are lexical verbs that lose their lexical meaning partially or entirely in an auxiliary verb construction. These constructions are called *postverbial constructions* (also known as *aspectual verb constructions*, *serial verbs*, *light verbs*, *verb sequences*) since the postverbally realized auxiliary determines the morphosyntax of the whole construction. They express viewpoint aspect as well as actionality and are discussed in detail in Section 6.4.9. Here, only one illustrating example and a list of all verbs occurring as auxiliaries are given. In example (131), the auxiliary *ke:s-* ‘throw’ expresses postterminality, i.e. it indicates that the given event is completed and regarded after the transgression of its relevant limit. Concretely, it means here that the old man was not in the process of killing reindeer but had killed it already.

- (131) *Ogonn’or taba-tin ölör-ön ke:s-pit.*
 old.man reindeer-POSS.3SG.ACC **kill-CVB.SEQ throw.AUX-PST2.3SG**
 ‘The old man has killed the reindeer.’
 (BeVP_1970_Laajku_flk.020)

Chart 33 gives an overview of all auxiliary verbs occurring in such postverbial constructions, ordered according to their frequency in the INEL Dolgan Corpus. In interlinear glossing, auxiliary verbs are treated as follows in the grammar at hand: The auxiliary *e-* is glossed as ‘AUX’, whereas in the case of other auxiliaries, the original lexical meaning is indicated as well, e.g. *is-* ‘go.AUX’.

3.5.5 Placeholder Verbs

The last group of verbs to be discussed here are so-called placeholder verbs. Being semantically empty, they replace another lexical verb due to hesitation or word-finding trouble of the speaker and often mirror the lexical verb’s morphology (Fox 2010: 1, 5–6). In Dolgan, there are two placeholder verbs, *kimne:-* and *kan’a:-*. Both of them are derived from interrogatives: *kimne:-* is a combination of the interrogative pronoun *kim* ‘who’ and the verbalizer -LA; whereas *kan’a:-* is a combination of the interrogative stem *kan-* ~ *kan’-* ~ *kaj-* (which has reflexes in Dolgan such as *kanna* ‘where’, *kajtak* ‘how’; see Section 3.3.2.4) and the synchronically unproductive verbalizer -A: (Däbritz 2018a: 290). The two

3.6.1.1 Temporal Adverbs

Temporal adverbs describe the temporal parameters of the event under discussion. So they can refer either to a certain point in time or to a period. Many temporal adverbs are deictic since they refer to a time point and period, respectively, from the moment of speech or are related to another time point or period. Such temporal adverbs are, for instance, the following.

<i>anî</i>	‘now’
<i>aniga</i>	‘until now; up to now’
<i>bettek</i>	‘lately; since lately’
<i>bîlîr</i>	‘long ago’
<i>čubu</i>	‘1. soon; 2. not long ago’
<i>dabnûô ~ damnûô ~ davno: ~ domnûô</i>	‘long ago’ (< Russian <i>davno</i> ‘id.’)
<i>davno:ttan</i>	‘since a long time’
<i>hotoru</i>	‘soon’
<i>kojut</i>	‘later’
<i>ötör</i>	‘recently’
<i>urut</i>	‘before; earlier’

As seen from the items *aniga* ‘until now’ and *davno:ttan* ‘since a long time’, the dative-locative (-GA) and ablative (-(t)An) cases can be used to indicate the final and the initial limit, respectively, of a given period.

Whereas these temporal adverbs do not indicate units of time measurement, the following ones do. The system of referring to the past and future is symmetrical, referring to time points before or after the moment of speech up to two days and one year, respectively.

<i>bügün</i>	‘today’
<i>begehe ~ begehe:</i>	‘yesterday’
<i>ınara: kün</i>	‘the day before yesterday; lit. the opposite day’
<i>harsın</i>	‘tomorrow’
<i>öjün ~ öjün</i>	‘the day after tomorrow’
<i>bijîl</i>	‘this year’
<i>bîlîri:n</i>	‘last year’
<i>ehi:l</i>	‘next year’

Another group of temporal adverbs refers to the times of the day and one of the seasons, namely spring.

<i>harsîerda ~ harsîerde ~ harsîarda</i>	'in the morning'
<i>künüs</i>	'by day'
<i>kiehe</i>	'in the evening'
<i>tün</i>	'at night'
<i>ha:s</i>	'in spring'

As for the items *kiehe* 'in the evening', *tün* 'at night' and *ha:s* 'in spring', it has to be mentioned that they are homonymous with the corresponding nouns 'evening', 'night' and 'spring'. Interestingly, *ha:s* 'spring; in spring' differs from the reference to the other seasons, which are formed with the derivational suffix -In (see Section 3.6.2).

Finally, a group of temporal adverbs refers to the frequency, duration, and "earliness" or "lateness" of the ongoing event. The expression for 'never' is not an underived adverb but expressed by the negative polarity item *kahan da* (see Section 3.3.2.6). Furthermore, the item *deŋŋe* 'sometimes' is derived from the adverb *deŋ* 'seldom', attaching the dative-locative case suffix -GA to the latter. Finally, the item *erdetten* 'in advance' combines the adverb *erde* 'early' and the ablative case suffix -(t)tAn.

<i>biêk</i>	'always' (< Russian <i>vek</i> 'all the time, forever')
<i>čubu</i>	'often'
<i>deŋŋe</i>	'sometimes'
<i>deŋ</i>	'seldom'
<i>ör ~ ö:r</i>	'long; for a long time'
<i>turkari</i>	'so long'
<i>erde</i>	'early'
<i>erdetten</i>	'in advance'
<i>manŋaj ~ mannaj</i>	'at first' (< Mongolic)

3.6.1.2 Local Adverbs

Local adverbs refer to the spatial circumstances of an event under discussion. Thereby, movement to, being at and movement from the given location can be distinguished. In Dolgan, the former two often fall together formally, whereas the latter has separate forms. The stems of adverbs expressing stative location are mostly not inflected. In contrast, adverbs expressing movement may exhibit case morphology: Movement to(wards) a location may call for the dative-locative case suffix -GA at the appropriate adverb, e.g. *allara:ga* 'down, downwards', and movement from a location calls for the ablative case -(t)tAn at the appropriate adverb, like in *allarattan* 'from down, from below', *ira:ktan* 'from far away', *taha:rattan* 'from outside' and *ü:hetten ~ üöhetten* 'from above'.

<i>allara ~ allara:ga</i>	'down' (where?, whither?)
<i>allarattan</i>	'from down, from below'
<i>bettek</i>	'closer' (where?, whither?)
<i>ira:k</i>	'far away' (where?, whither?)
<i>ira:ktan</i>	'from far away'
<i>oŋuōr</i>	'on the other side'
<i>taha:ra</i>	'out' (whither?), 'outside' (where?)
<i>taha:rattan</i>	'from outside'
<i>ü:he ~ üöhe</i>	'up' (whither?, where?)
<i>ü:hetten ~ üöhetten</i>	'from above'

Besides these, a couple of local adverbs lack the functional trichotomy and formal dichotomy, respectively. To some extent, they can be regarded as border cases between local and manner adverbs since, e.g. *ittenne* refers to both the location of an item and how it is lying or the like.

<i>batari</i>	'into; inside' (whither?)
<i>biha</i>	'through; directly'
<i>intak</i>	'away'
<i>ittenne ~ ittene</i>	'on the back'
<i>kurdari</i>	'straightforward'
<i>taynari</i>	'upside down'
<i>tögürüččü</i>	'around'
<i>töttörü</i>	'back'
<i>tūōra</i>	'across'

3.6.1.3 Manner Adverbs

Manner adverbs describe how a given event happens, i.e. its circumstances are further specified. Semantically, manner adverbs are represented by wildly divergent items, whence it is hardly helpful to classify them further. The most frequent manner adverbs in Dolgan are as follows.

<i>ana:n</i>	'especially; on purpose'
<i>araj ~ agaj</i>	'suddenly'
<i>belem</i>	'ready; readily'
<i>besele:</i>	'happily' (from Russian <i>veselee</i> 'happily.COMP')
<i>bulqu</i>	'broken; apart'
<i>emiske</i>	'unexpectedly'
<i>epiēt ~ epe:t ~ op'at' ~ ap'at'</i>	'again' (< Russian <i>opjat'</i> 'id.')
<i>hati:</i>	'by foot'

<i>höbö</i>	‘right; correctly’
<i>inn’e ~ inne ~ inn’en ~ inniën</i>	‘so’
<i>kam ~ kamki ~ kampi</i>	‘strongly; firmly’
<i>lapka ~ lovka</i>	‘skilfully’ (< Russian <i>lovko</i> ‘id.’)
<i>me:ne</i>	‘1. simply; 2. in vain’
<i>tuspa</i>	‘1. individually; 2. separately’

3.6.1.4 Degree Adverbs

Degree adverbs specify to what extent the relevant event is completed or an applicable quality is given. Thus, degree adverbs can modify verbs, adjectives and adverbs. It sparks the eye that many items express a high degree of completion of an event or a quality, respectively, out of which some are borrowed from Russian. The following list shows the most frequent degree adverbs in Dolgan.

<i>ad’as ~ ajas</i>	‘completely; at all’
<i>būōpsa</i>	‘completely; at all’ (< Russian <i>vovse</i> ‘id.’)
<i>dolūōj</i>	‘completely; at all’
<i>hapsiēm ~ hopsiēm ~ saps’em</i> ~ savs’em	‘completely, at all’ (< Russian <i>sovsem</i> ‘id.’)
<i>amattan</i>	‘at all’
<i>törüit</i>	‘at all’
<i>bagaj(i)</i>	‘very’
<i>bert ~ berke</i>	‘very’
<i>hürde:k</i>	‘very’
<i>mija: ~ min’a: ~ muja</i> ~ mun’a	‘very’
<i>olus</i>	‘very’
<i>delbi</i>	‘enough; sufficiently’
<i>alis</i>	‘too’
<i>orduk</i>	‘more; anymore’
<i>aračči ~ aričči ~ aričča</i>	‘hardly’

The syntax of *bagaj(i)* ‘very’ and *mija: ~ min’a: ~ muja ~ mun’a* ‘very’, modifying adjectives and adverbs, calls for comment. Contrary to the head-final structure of Dolgan, the adverbs follow after the modified item and are inflected for nominal categories if necessary. In example (134), the adjectives *tot* ‘sated’ and *ičiges* ‘warm’ function as predicates. Being modified with the adverb *bagaj(i)* ‘very’, the predicative suffixes of the first person plural are realized at the latter (see also Section 7.2 for the syntax of adjective phrases).

- (134) *Ani tot bagaj-bit, ičiges bagaj-bit.*
 now sated **very-1PL** warm **very-1PL**
 'Now we have enough to eat, and we are very warm.'
 (AnMS_1972_GoodSovietTimes_nar.047)

3.6.1.5 Modal Adverbs

Modal adverbs describe the speaker's attitude towards a given event in one or another way. Most often, epistemic modality, that is, a judgement on the probability of the event, or deontic modality, that is, a judgement on the necessity of the event, is expressed. The most frequent modal adverbs are the following.

<i>abaga</i>	'in either case'
<i>abis</i>	'perhaps' (< Russian <i>avos</i> 'id.')
<i>araj ~ agaj</i>	'only'
<i>bagar</i>	'maybe'
<i>bihila:k ~ bihi:la:k ~ bihilak</i>	'apparently'
<i>bulgu</i>	'by all means'
<i>da:gani ~ da:gini</i>	'maybe'
<i>hin</i>	'anyway; in any case'
<i>hiēse</i>	'1. better; 2. generally; 3. luckily'
<i>ile</i>	'indeed'
<i>kirdik</i>	'indeed; really'
<i>össüō ~ esō ~ es'o</i>	'still' (< Russian <i>ješčō</i> 'id.')

3.6.2 Adverbs Formed with Derivational Suffixes

For deriving adverbs from nouns or adjectives, there are the suffixes -Tlk, -In, and -LI:. The suffix -Tlk forms adverbs from adjectives without change in meaning, e.g. *üčügejdik* 'well' < *üčügej* 'good' and *türgennik* 'quickly' < *türgen* 'quick'. Its morphonological behaviour is regular, yet showing variation in derivations from the degree adverb *bagaji* 'very'. Here, the stem-final vowel is mostly omitted, and the suffix attached can be either *-tik* (expected on a vowel stem) or *-dik* (expected on a stem ending with a voiced consonant), yielding *bagajtik ~ bagajdik*. The suffix -In may principally fulfil the same function, e.g. *baskuōjin* 'beautifully' < *baskuōj* 'beautiful' and *hogotogun* 'lonely; alone' < *hogotok* 'single', but it occurs much less frequently. Moreover, it plays a peculiar role in forming a small group of temporal adverbs. It is attached to nouns expressing daytimes or seasons, e.g. *tünün* 'at night' < *tün* 'night' or *ha:hin* 'in spring' < *ha:s* 'spring'. In the case of the items expressing '(in) summer', '(in) autumn' and '(in) winter', the derived adverb even replaced the original noun: Thus, *hajin* (< **jaj* 'summer') means both 'summer' and 'in summer', *kühün* (< **kü:z* 'autumn') means

both ‘autumn’ and ‘in autumn’, and *kihīn* (< **kiš* ‘winter’) means both ‘winter’ and ‘in winter’. Interestingly, two of these forms can once more be suffixed with -In, yielding the redundant forms *hajinin* ‘in summer’ and *kihinin* ‘in winter’ (see also Stachowski (1994: 252–253; 1997: 35–36) for this suffix). The suffix -LI: forms similitive adverbs from both nouns and adjectives, e.g. *ogolu*: ‘like a child’ < *ogo* ‘child’ and *hakali*: ‘in Dolgan (language)’ < *haka* ‘Dolgan’. In the latter function, the suffix is very frequent.

The suffixes -I, -čAk, čI and -ččI derive adverbs from verbs, in most cases from depictive verbs, like in example (135). The suffix -ččI is of Mongolic origin (Kałużyński 1961: 112–113).

- (135) *Bu kīhi balig-i loglo-čču mus-put – [...].*
 this human fish-ACC **hulk.up-ADVZ** gather-PST2.3SG
 ‘This human gathered the fish together on piles [from his net].’
 (PoXN_19701118_Chopochuka_flk.004)

However, such formations of adverbs are pretty rare; instead, converbs of the depictive verbs are often used.

The suffix -TA, finally, forms multiplicative adverbs from cardinal numerals, e.g. *birde* ‘once’ < *bir* ‘one’, *üste* ‘thrice’ < *üs* ‘three’ or *uōnna* ‘ten times’ < *uōn* ‘ten’. The suffix has a Mongolic provenance, as shown by Kałużyński (1961: 118). *Birde* ‘once’ is lexicalized inasmuch as it can also mean ‘once (upon a time)’ with a temporal meaning.

- (136) *Tojus üs-te ip-pit, [...].*
 Ewenk **three-MLTP** shoot-PST2.3SG
 ‘The Ewenk shot thrice [but he shot just through the edge of his seam].’
 (ChPK_1970_Nganasan_flk.025)

3.6.3 Adverbs Formed from Petrified Case Forms

The third group of adverbs contains very frequently used items that are petrified case forms of demonstrative pronouns and the numeral *bir* ‘one’, or petrified adpositional phrases. The suffixation of the demonstrative pronouns *bu* (proximal), *iti* (medial) and *ol* (distal) (see Section 3.3.2.3) with case suffixes leads to the formation of local or temporal demonstrative adverbs. The historical locative suffix *-DA derives lative and locative forms, and the ablative suffix -(t)An derives ablative forms, e.g. the proximal forms *manna* (*munna*, *banna*, *bunna*) ‘hither; here’ and *mantan* ‘from here’. The corresponding medial and distal forms are *itinne*, *itinten*, *onno*, and *onton*. The form *onton* also expresses temporal deixis, meaning ‘then; after that’, and frequently replaces a coordinating conjunction. The instrumental case of *ol* forms the adverb *onon* ‘so; like

this/that', which nearly has lost its deictic function and can even be used for clause linkage like in example (137).

- (137) *Onon gini minigi-n kete-t-er.*
so 3SG.PRO 1SG.PRO-ACC guard-CAUS-PRS.3SG
[‘The czar’s people and daughter are dying.’] So he makes me guard
[their reindeer].’
(PoNA_19900322_PoorBoyDevil_flk.022)

Besides that, also quantification can be combined with demonstratives: The demonstrative pronoun is combined with the approximative suffix *-(č)čA*, yielding the forms *bačča* ‘so much; to this extent’ and its medial and distal counterparts *itičče* and *oččo*. The latter form is further modified with the dative-locative suffix *-GA*, yielding the temporal adverb *oččogo* ‘then; at that time’, which lacks proximal and medial counterparts. Finally, the amalgamation of the demonstrative pronouns with the postposition *kördük* ‘like’ gave rise to the similative demonstrative adverbs *bugurduk* (*burtuk*), *itigirdik* and *ogurduk* with the rough meaning ‘so; like this/that’. Chart 34 summarizes all kinds of demonstrative adverbs in Dolgan. All forms can be further modified with the emphatic prefix *h-*, which forms items like *hubunna* ‘exactly here’ or *hoččo* ‘exactly to that extent; so very much’.

Finally, the adverb *bi:rgə* ‘together’ is another instance of petrified case forms since it is derived from the dative-locative form (*-GA*) of the cardinal numeral *bir* ‘one’.

CHART 34 Demonstrative adverbs

	Proximal	Medial	Distal
Pronoun	<i>bu</i>	<i>iti</i>	<i>ol</i>
Lative/locative adverb	<i>manna ~ munna ~ banna ~ bunna</i>	<i>itinne</i>	<i>onno</i>
Ablative adverb	<i>mantan</i>	<i>itinten</i>	<i>onton</i>
Prolative/instrumental adverb ^a	<i>(bunan) ~ (manan)</i>	<i>(itinen)</i>	<i>onon</i>
Quantification	<i>bačča</i>	<i>itičče</i>	<i>oččo</i>
Temporal adverb	-	-	<i>oččogo</i>
Similative adverb	<i>bugurduk (burtuk)</i>	<i>itigirdik (itirdik)</i>	<i>ogurduk</i>

a The proximal and medial forms of prolative/instrumental adverbs can be formed according to existing grammatical descriptions, but do not occur in the material analyzed here. This may be due to the low frequency of the respective functional domains expressed.

3.7 Postpositions

Postpositions belong to the group of adpositions, i.e. they are items that form a unit together with a noun phrase to specify the latter's grammatical and semantic relation to other constituents of the clause. In Dolgan, there are only postpositions, and prepositions do not occur. Compared to other languages, the number and frequency of local postpositions are relatively low in Dolgan. This is because local cases of nouns (see Section 4.2) and a dozen relational nouns (see Section 3.1.3) fulfil similar functions. Relational nouns are sometimes subsumed under the notion of postposition (e.g. in Ubrjatova (1985: 186–187)). From my point of view, however, relational nouns differ significantly from postpositions since they can stand alone on the one hand and are regularly inflected for case on the other hand. Postpositions, in turn, fulfil neither of these criteria.

Postpositions form adpositional phrases, usually taking a nominal item as a complement (see Section 7.4). This complement is often a noun or a pronoun, more seldom an adjective or a numeral. In the case of some postpositions (*dieri* 'until', *gitta ~ kitta* 'with', *hagina* 'during; when', *ihin* 'because of', *kenne* 'after', *kördük* 'like', *tali* 'similar to', *turkari* 'as long as'), the complement may also be a participle. If so, the adpositional phrase forms an adverbial subordinate clause (see Section 9.3.3). Moreover, postpositions govern the case of their complement, which may be the nominative, genitive, accusative, dative-locative or ablative case. As for the former two case forms, a short comment is in order already here. Nouns without possessive suffixes do not exhibit genitive forms, whereas nouns inflected with possessive suffixes exhibit a genitive form homonymous with the accusative case (see Sections 4.2.1 and 4.3.2 for details). In Turkic languages, many inherited postpositions govern the nominative case of nouns and the genitive/oblique case of pronouns (Johanson 2021: 543). In Dolgan, these postpositions behave slightly differently since the nominative case occurs with non-possessive nouns, including pronouns, and the genitive case with possessively inflected nouns. The examples (138) and (139) with the postposition *üstün* 'along; through' illustrate this.

- (138) *Kirsa huol üstün hür-en is-pit.*
 polar.fox trace along run-CVB.SEQ go.AUX-PST2.3SG
 'A polar fox was running along a trace.'
 (AsKS_19xx_Amulet_nar.003)

- (139) *Oruō it huōl-un üstün bar-bit.*
 Oruo dog trace-POSS.3SG.GEN along go-PST2.3SG
 'Oruo went along the dog's trace.'
 (AsKS_19XX_Amulet_nar.196)

However, this seems to hold only for nouns inflected with possessive suffixes of the third person. In the case of first- and second-person possessive suffixes, there is considerable variation with a tendency towards using the nominative case like in example (140).

- (140) [...], *aṇar-in uōlug-uṇ ustun kut-an*
 half-POSS.3SG.ACC collar-POSS.2SG through pour-CVB.SEQ
is.
 go.AUX.IMP.2SG
 '[Drink the half], pour the other half into your collar.'
 (ErSV_1964_WarBirdsAnimals_flk.525)

Postpositions, which govern the nominative and genitive cases, respectively, are the following ones.

<i>a:ji</i>	'to/at every'
<i>a:jittan</i>	'from every'
<i>dīēk ~ dīēg ~ dek ~ dīēt</i>	'to'
<i>dīēkki ~ dīēki</i>	'in the direction of'
<i>ere:ri</i>	'despite of'
<i>haga</i>	'big as'
<i>hagīna</i>	'during; when'
<i>ihin</i>	'1. because of; 2. for'
<i>kenne ~ genne ~ kennine</i>	'after'
<i>kördük ~ korduk ~ kurduk</i>	'like'
<i>kotu</i>	'in the direction of'
<i>kuraja</i>	'approximately'
<i>orduk</i>	'more than'
<i>turkari ~ tukkari ~ tukari</i>	'as long as'
<i>üstün ~ ustun</i>	'through', 'along'

The items *ihin* 'because of; for' and *kördük* 'like' are very frequently used with demonstrative pronouns. The phrase *ol ihin* is lexicalized as 'therefore' and tends to be grammaticalized as a coordinating conjunction. The combination of demonstrative pronouns and *kördük* 'like' yields demonstrative adverbs,

which already stick to the rules of vowel harmony and intervocalic voicing of consonants, e.g. *bugurduk* ‘like this’ < *bu kördük* ‘this like’ (see Section 3.6.3).

The postpositions *a:ji* ‘to/at every’ and *a:jittan* ‘from every’ deserve a more detailed discussion since their morphosyntactic behaviour is unexpected to a large extent. The given translations suggest that *a:ji* has both locative and quantificational semantics, giving rise to distributive readings. This can be illustrated by clauses with an adpositional phrase formed by *a:ji* in argument position: In example (141), the children receiving the soup play the semantic role *beneficiary*, which usually would call for the dative-locative case suffix. Since the latter is absent in the given clause, the postposition itself must express the semantic role *beneficiary*—as a narrowed case of the semantic role *goal*. The same is true in locative contexts, like in example (142), where the speaker says she has children everywhere. The postposition *a:jittan* ‘from every’, in turn, expresses the source of movement, like in example (143).

- (141) *Ogo a:ji kut-atta-bit-tar balik min-in.*
 child to.every pour-MULT-PST2-3PL fish soup-POSS.3SG.ACC
 ‘They filled in fish soup for every child.’
 (PoNA_19900810_Tojo0InVoloChanka_nar.095)
- (142) *Bar-îak e-bip-pin, kop-pop-pun, hir aji*
 go-PTCP.FUT AUX-PST2-1SG make.it-NEG.PRS-1SG place at.every
ogo-lo:k-pun.
 child-PROPR-1SG
 ‘I would go, [but] I am not able to, I have children everywhere.’
 (KiPP_NN2_2009_Clothes_nar.KiPP.009)
- (143) *Kergen a:ji-ttan kim kird’agas-tarin*
 family at.every-ABL who.PH old-POSS.3PL.ACC
il-atta-bit-tara.
 take-MULT-PST2-3PL
 ‘From each family, the old people were taken.’
 (BeES_1997_HistoryOfKatyryk_nar.052)

If necessary—i.e. in the case of possessed nouns—*a:ji* and *a:jittan* govern the genitive case of their complement like in example (144). This pattern, however, is scarce in natural Dolgan speech.

- (144) *Kihi-ler uraha d'ie-lerin a:ji bar-atta:bit-tar.*
 human-PL pole tent-POSS.3PL.GEN to.every go-MULT-PST2-3PL
 'The people scattered to their chums.' (lit. 'The people went to every
 chum of theirs.')

(PoNA_19900810_TripToVoloChanka_nar.119)

Finally, the item *a:ji* also forms adverbial clauses, which express the incremental accomplishment of an event. Again, this pattern is infrequent in natural speech but used in the few available literary texts.

- (145) *Ka:m-tag-in a:ji ka:r-ga*
 walk-PTCP.COND-POSS.3SG.GEN at.every snow-DAT/LOC
ke:h-er kihil huðl-u.
 let-PRS.3SG red trace-ACC
 'With each step, he leaves a red trace behind on the snow.'

(AsKS_19XX_Amulet_nar.016)

The next group of postpositions govern the accusative case. Most of them historically trace back to a converb form or an adverb derived from a verb (Ubrjatova 1985: 188–189). This also explains the government of exactly the accusative case since the original verb was governing it, which is most apparent in the following two cases: *biha* 'through; during' < *bis-* 'cut' + -A 'CVB.SIM' and *gitta ~ kitta* 'with' < *kitin-* 'unite' + -A 'CVB.SIM'. Literally, the postpositions, thus, mean 'cutting X' and 'uniting X', where accusative marking of X is expected from a morphosyntactic point of view. Besides that, some of the postpositions of this group are homonymous with the corresponding local adverbs (see Section 3.6.1.2), which have the same semantics but occur in different morphosyntactic domains. Postpositions governing the accusative case are the following.

<i>biha</i>	'1. through; 2. during'
<i>gitta ~ kitta</i>	'with'
<i>huptu</i>	'through'
<i>kurdari</i>	'through'
<i>meld'i</i>	'1. through; 2. whole'
<i>tūōra</i>	'across'
<i>tögürüččü</i>	'around'
<i>utari</i>	'towards'

The postposition *gitta ~ kitta* is especially frequent and occurs in two important domains: First, it expresses accompaniment (146) and second, it may coordinate noun phrases (147).

- (146) *Ogo-lor-gun gitta olor-un-a-gin.*
child-PL-POSS.2SG.ACC with live-MID-PRS-2SG
 ‘You are living with your children.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.063)
- (147) *Taba-lar böörö-nü gitta meli-s gim-mit-tar.*
reindeer-PL wolf-ACC with disappear-NMLZ make-PST2-3PL
 ‘The reindeer and the wolf disappeared.’
 (AsKS_19xx_Amulet_nar.080)

Three postpositions govern the dative-locative case, whereby two of them (*dîeri* and *tali*) are pretty frequent.

dîeri ‘1. until; 2. up to’
herge ‘beneath’
tali ‘similar to’

Two postpositions, namely *taksa* ‘over; more than’ and *tuspa* ‘besides; apart from’ govern the ablative case. In the former case, this can be explained once more by the item’s origin: *Taksa* is the simultaneous converb form of the verb *tagis-* ‘go out’, which governs the ablative case for the indication of the source of movement. In the case of *tuspa* ‘besides; apart from’, the government of the ablative case can be explained similarly since its semantics also imply the separation of one referent from another.

Finally, there is the postposition *baran* ~ *bara:n* ‘after’, grammaticalized from the sequential converb form *bar-an* ‘go-CVB.SEQ’. This postposition does not take a noun phrase as its complement but a verb phrase headed by a sequential converb form. Therefore, it forms subordinate temporal clauses (see Section 9.3.3.1).

- (148) *Dud’inka-ga kel-en baran buô minigi-n*
 Dudinka-DAT/LOC come-CVB.SEQ **after** EMPH 1SG.PRO-ACC
buô Pata:pava-ga i:p-pit-tara.
 EMPH Potapovo-DAT/LOC send-PST2-3PL
 ‘After having arrived in Dudinka, I was sent to Potapovo.’
 (KiLS_KiES_2009_Life_nar.KiLS.028)

3.8 Particles and Clitics

Particles belong to the class of function words and modify other constituents morphosyntactically or semantic-pragmatically. Clitics generally have the same function but differ from the perspective of prosody since they form one phonetic word with the item they modify. In Dolgan, many particles are frequently cliticized in spoken language, as shown in example (149). The borderline between particles and clitics is, thus, fuzzy. The only item that cannot stand alone bearing stress is the interrogative clitic =(I)j. For the sake of comprehensiveness, all other items are described and represented as particles in what follows, though having in mind that many of them may be cliticized.

- (149) *Ani=ke: bul-lar-îāk e-ti-ŋ dūō ol*
now=EMPH find-CAUS-PTCP.FUT AUX-PST2-2SG Q that
îāl-lar-i?
 inhabitant-PL-ACC
 ‘Could you bring us now to those people, though?’
 (PoKK_1964_TwoOrphanBoys_flk.261)

Particles are involved in different domains of morphosyntax, most frequently expressing modality and evidentiality. General modal particles are lexicalized forms of the copula verb *būōl*- ‘be; become’: *būōl* (imperative mood, second person singular), *būōllun* (imperative mood, third person singular) and *būōlla* (simple past tense, third person singular). Often these particles convey a connotation of disjunction, like in example (150). A similar function is fulfilled by the modal particle *dūō* ~ *du:* ~ *du* (151).

- (150) *Aččik būōl, tot būōl – ol kördük olor-o-but di.*
 hungry **MOD** sated **MOD** that like live-PRS-1PL **EMPH**
 ‘Be it hungry or sated, so we live.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.174)

- (151) *Etiḥ-el-ler dūō, kers-el-ler dūō,*
 quarrel-PRS-3PL **MOD** abuse.each.other-PRS-3PL **MOD**
kijḡa-s-al-lar dūō.
 get.angry-RECP-PRS-3PL **MOD**
 ‘Maybe they are quarrelling, abusing each other, are angry with each other.’
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.107)

The particle *du̯o ~ du: ~ du* is additionally used as an interrogative particle in polar questions (152). The particle *d'ürü* is likewise used as an interrogative particle, appearing in both polar (153) and content (154) questions. Nonetheless, the particle *du̯o ~ du: ~ du* is much more frequent. In content questions, also the interrogative clitic =(I)j occurs (155). See also Section 8.4.2 for the syntax of interrogative clauses.

- (152) *U̯ot-u ott-u̯o-m du̯o?*
 fire-ACC light-FUT-1SG Q
 'Shall I light a fire?'
 (KuDP_2009_Fire_nar.005)
- (153) *Tu̯olkul-u̯ok-tara d'ürü?*
 understand-FUT-3PL Q
 'Will they understand?'
 (PoNA_19910207_Fishing_nar.031)
- (154) *Kajtak kihi bu̯ol-u̯o-m d'ürü?*
 how human become-FUT-1SG Q
 'How shall I survive?'
 (AkEE_19XX_BoySister_flk.058)
- (155) *Kim-iŋ karaj-i̯ag-a=j?*
 who-POSS.2SG care.about-FUT-3SG=Q
 'Who will take care [of you]?'
 (BoND_1964_ThreeBrothers_flk.010)

Besides the general modal particles discussed above, the particle *na:da* 'need to; necessary', borrowed from Russian *nado* 'id.', expresses only deontic modality. Thereby, it takes part in paradigm building, forming the necessitative mood 2 (see Section 6.5.7.2); example (156) illustrates its usage. Given this grammaticalized usage, the particle *na:da* 'need to; necessary' cannot be cliticized.

- (156) *Kepset-i̯ek-kitin na:da, birge*
 chat-PTCP.FUT-POSS.2PL.ACC **need.to** together
olor-u̯ok-kutun na:da.
 live-PTCP.FUT-POSS.2PL.ACC **need.to**
 'You have to talk, you have to live together.'
 (SuON_KuNS_19990303_HardLife_conv.KuNS.041)

Closely related to modal particles are evidential particles, which express the speaker's source of a given piece of information. The expression of evidentiality is relatively simple in Dolgan compared to many surrounding languages in Northern Eurasia, distinguishing only indirect evidentiality formally (see Section 6.6 for details). All of the following evidential particles mark indirect evidentiality in Dolgan: *būōllaga*, *ebit* ~ *et*, *eni*, *ühü*. Whereas *eni* and *ühü* are underived items, *būōllaga* is the petrified third-person singular inferential form of the verb *būōl*- 'be; become', and *ebit* ~ *et* is the petrified (and contracted) third-person singular form of the postterminal evidential past of the verb *e*- 'be'. Given the latter's complexity, it is not surprising that *eni* and *ühü* can be cliticized, but *būōllaga* and *ebit* ~ *et* cannot. Since *būōllaga* and *ebit* ~ *et* are more thoroughly discussed in Section 6.6, here only two examples of the usage of *eni* and *ühü* are provided. Thereby, *eni* is used when the speaker concludes the given information from extra-linguistic circumstances. In example (157), the speaker—a bird with broken wings—tries to fly, fails and concludes that it will stay where it is. The particle *ühü*, in turn, is used in the case of hearsay information: In example (158), the speaker repeats a legend told on and on again, that is, he has gotten to know it from another person.

- (157) *Hir-be-r* *ka:l-a-bin* *eni!*
 place-POSS.1SG-DAT/LOC stay-PRS-1SG **apparently**
 'I will apparently stay at my place.'
 (ErSV_1964_WarBirdsAnimals_flk.224)
- (158) *Bilir* *Norilskaj-ga* *kine:s-te:k-ter* *ühü.*
 long.ago Norilsk-DAT/LOC prince-PROPR-3PL **they.say**
 'A long time ago, they had a prince in Norilsk, it is said.'
 (BaRD_1930_DaughterOfUrungAjyy_flk.001)

Besides modal and evidential particles, there are the particles *ha:maj* 'most' (< Russian *samyj* 'id.'), *muŋ* 'most' and *ilik* 'not yet'. The former two form the superlative degree of adjectives (159), whereas the latter forms the abessive participle (see Section 6.3.1.8) and the abessive tense-aspect form ((160); see Sections 6.4.7 and 6.4.8).

- (159) *Ogonn'or muŋ ütūō taba-lar-i-nan* *kötüt-en*
 old.man **most good** reindeer-PL-POSS.3SG-INS run-CVB.SEQ
kel-er.
 come-PRS.3SG
 'The old man comes in a gallop with his best reindeer.'
 (SaSS_1964_NganasanBraveBoy_flk.109)

- (160) *Ogo-lor-but kira-lar, kîâ-n-a ilik-ter.*
 child-PL-POSS.1PL small-3PL can-REFL-CVB.SIM not.yet-3PL
 ‘Our children are small, they cannot [take care of themselves] yet.’
 (ErSV_1964_WarBirdsAnimals_flk.009)

Finally, the existential items *ba:r* ‘there is’ and *hûok* ‘there is not’ are analyzed as nouns in this grammar and not as particles (see Section 3.1.4 for a justification). In some contexts and paradigms, however, they also exhibit characteristics of particles, e.g. in forms of the negative counterfactual mood like *bar-îâk hûok e-ti-m* ‘go-PTCP.FUT NEG AUX-PST1-1SG’ = ‘I would not have gone’.

Particles fulfilling semantic or pragmatic functions are often more fuzzy in their usage and, thus, more difficult to describe. From a prosodic perspective, they are the particles that are most prone to cliticization. The particles *eme* ~ *emete*, *ere* ~ *ire* and *da:* ~ *da* form indefinite pronouns from interrogative pronouns. The items formed with *da:* ~ *da* additionally function as negative polarity items in negative clauses (see Sections 3.3.2.6 and 8.5.1). Moreover, *da:* ~ *da* is frequently used to express emphasis, often conveying an additive reading like in example (161). As a result of this function, the particle also appears in constituent negation as well as resumptive quantification (see Section 8.5.2).

- (161) [...] *ani da: ba:r ol.*
 now EMPH/ADD EX that
 ‘[She is healing herself only with herbs], she is still there.’
 (SuON_KuNS_19990303_HardLife_conv.SuON.231)

Other emphatic particles used in similar contexts are as follows: *ama*, *bagas*, *bûo*, *da:gani* ~ *da:gini*, *di:*, *din*, *itte*, *ke* ~ *ka* ~ *kîê*. Formally, *di:* and *din* are lexicalized from the simultaneous and sequential converb forms, respectively, of the speech verb *dîê*- ‘say’. The very frequent particle *bûollagina* (*bûollaginan*, *bûollaktarina*) can express emphasis, too, but it can also express an adversative reading like in example (162). From a formal point of view, it is lexicalized from the third-person singular conditional/temporal mood form of the copula verb *bûol*- ‘be; become’. Here it is especially noteworthy that also the third-person plural form can occur, like in example (163).

- (162) *Urukku bûollagina bütej hetî: dîê-čči-ler.*
 former though closed sledge say-HAB-3PL
 ‘Earlier, though, they called it “the closed sledge”.’
 (AnIM_2009_Argish_nar.027)

- (163) *Ogo-lor buöllaktarina kihi-ler-i kör-böt-tör.*
 child-PL **though** human-PL-ACC see-NEG.PRS-3PL
 'But the children do not look at the people.'
 (PoNA_19900810_Tojo0InVoloChanka_nar.005)

Besides these emphatic particles, there is a handful of discourse particles, which often lack a concrete lexical meaning but structure an utterance or fill pauses. Such particles are, for example, *d'e ~ de ~ če* 'well', *ha:tar* 'though', *hin* 'however' as well as *ta:k ~ tak* 'so', the latter borrowed from Russian.

3.9 Interjections, Conversational Formulas and Onomatopoeia

Interjections may be functionally close to emphatic particles but significantly differ from a syntactic point of view since they can constitute an utterance on their own and usually stand outside the clause structure (Ameka 1992: 105). Some interjections are widely distributed and lack a clear functional domain, e.g. *e:* 'eh', *e:j* 'eh, hey', *mhm* 'hmm', *o:* 'oh'. On the other hand, there are interjections, which have more specific functions. The widespread interjection *kaja* 'hey; well; come on' can be used to call somebody's attention (164) but can also have a hortative reading (165).

- (164) *Kaja, ogonn'or, togo kel-li-ŋ?*
hey old.man why come-PST1-2SG
 'Hey, old man, why did you come?'
 (MiAI_1964_OldPeasantOldWoman_flk.008)
- (165) *Kaja da, üöret, abira:!*
come.on EMPH teach.IMP.2SG help.IMP.2SG
 'Come on then, teach, help!'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.179)

The interjections *ara:* 'oh dear' and *ibi:j ~ ibij ~ ibiâj* 'my God, oh dear' express surprise, fright, disgust and dislike, the latter being slightly more expressive as a tendency.

- (166) *Ara:, d'e üle-te ügüs e-t-e*
oh.dear well work-POSS.3SG much be-PST1-3SG
itin-ti-ŋ.
 that-POSS.3SG-POSS.2SG
 'Oh dear, that was a lot of work.'
 (SuON_KuNS_19990303_HardLife_conv.SuON.195)
- (167) *Nulevoj klass e-t-e, ibi:j, ibi:j, bu fârankan.*
 zero class be-PST1-3SG **my.God my.God** this difficult
 'The zero class, my God, was so difficult.'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.077)

The interjection *be:be* 'wait', finally, signals the hearer to wait with some action they want to perform. In example (168), the speaker tells the interviewer that the latter should wait to allow her to perform a song before continuing the interview.

- (168) *L'uboj iriâ-ta ill-iâ-m, be:be.*
 random song-PART sing-FUT-1SG **wait**
 'I will sing some song, wait.'
 (UkET_AkEE_19940424_SongsTales_conv.UkET.050)

Besides these clear instances of interjections, there are conversational formulas that differ functionally to some extent. They are the affirmative and negative items *he: ~ iê ~ e:* 'yes' and *huôk* 'no' ((169) and (170)), which serve to confirm or to deny a given event.

- [Context: "Your clan is Majmago, right?"]
- (169) *"He:, Majmago-lar, aga."*
yes Majmago-PL aha
 "Yes, the Majmagos, mhm."
 (MaPX_KuNS_200X_YakutsOfEssej_conv.MaPX.039)
- [Context: "Are you able to stalk?" the old man asked the boy.]
- (170) *"Huôk, uôŋ-e:čči-te huôk-pun."*
no stalk-PTCP.HAB-POSS.3SG **NEG-1SG**
 "No, I usually do not stalk."
 (PoKK_1964_TwoOrphanBoys_flk.270)

Also, the expression of thanking *pasi:ba* ‘thank you’ and the greeting formula *doro:bo* ‘hello’ function similarly. Both items are borrowed from Russian and lack inherited Dolgan counterparts, which implies that the verbalized expression of thank and greeting was not common among Dolgans before the advent of Russians. Formally, it sparks the eye that *pasi:ba* ‘thank you’ is not adapted to Dolgan phonotactics, whereas its Sakha counterpart *bahiba* ~ *pahiba* is (Barbolina et al. 2019: 312–313). The greeting formula *doro:bo* ‘hello’ is functionally indeed an interjection. Still, it behaves partly like a verb stem since it carries the second-person plural imperative marker when more than one person is addressed (Nina S. Kudrjakova, p.c.).

- (171) *“Doro:bo-ŋ, doro:bo-ŋ, kird’agas-tar”, diē-t-e Bulčut*
hello-IMP.2PL hello-IMP.2PL old-PL say-PST1-3SG Hunter
ūōl-but.
 boy-POSS.1PL
 ‘“Hello, hello, old people!” Hunter said, the boy.’
 (NaLE_2002_StonyBone_flk.017)

Finally, onomatopoeic items imitate the sound which accompanies the given event. The examples (172) and (173) illustrate this, but there is a need for a more systematic account for onomatopoeic expressions in Dolgan, especially the sounds animals make and alike.

- (172) *Loŋ-loŋ, loŋ-loŋ – loŋsuj-but buō.*
knock-knock knock-knock knock-PST2.3SG EMPH
 ‘Knock-knock, knock-knock, it [= a jay] pecked.’
 (UkET_2002_FoxJayBuzzard_flk.061)
- (173) *Hîa-la:k mî:n-i ba:ti-nan “hu:p” gim-mit.*
fat-PROPR soup-ACC this-POSS.3SG-INS slurp make-PST2.3SG
 ‘He slurped the fat bouillon out of it [= a scoop].’
 (BaA_1930_OldManOldWoman_flk.079)

Nominal Inflectional Morphology

Dolgan nominals (nouns, adjectives, numerals and to a lesser extent also adverbs and particles) inflect for the categories number, case and possession. Moreover, in non-verbal predication contexts, nominal elements can be inflected verbally (see Sections 4.4 and 8.2). The order of morphemes in nominal inflection is the following:

stem—(derivation)—number—possession—case

Whereas number suffixes always can be distinguished easily from possessive and case suffixes (for exceptions in the third person plural, see below), possessive and case suffixes often are amalgamated when occurring together. In this chapter, number (4.1) and case inflection (4.2.1) are discussed first. Moreover, some essential case functions are described from a semasiological point of view (4.2.2). After that, possessive suffixes (4.3.1) and their interplay with case inflection (4.3.2) are dealt with. Section 4.4 finally deals with some formal properties of nominal predication.

4.1 Number

The number system of Dolgan is straightforward, formally distinguishing singular from plural, e.g. *taba* ‘reindeer’ vs *taba-lar* ‘reindeer-PL’. However, there are also nominal forms underspecified for the singular-plural opposition. In typological literature, such forms have been labelled *inter alia* as *general number* (Corbett 2000) or *transnumeral* (Itturioz-Leza & Skopeteas 2004). Within this grammar, they are dealt with together with singular forms since they never differ from the latter formally.

4.1.1 Singular

The singular is unmarked in Dolgan. In its core function, the singular refers to exactly one referent. All other seemingly singular forms (e.g. paired nouns, quantified nouns) are in fact underspecified for number, as will be shown below. Example (174) shows an unambiguous singular form: The sentence is from a tale about one reindeer and one mouse so that only a singular reading is available here.

- (174) *Taba kisten-n-e.*
reindeer hide-PST1-3SG
 'The reindeer hid.'
 (AkEE_19900810_ReindeerMouse_flk.007)

An unambiguous singular reading often correlates with semantic-pragmatic definiteness and specificity. In example (175), both the demonstrative pronoun *bu* 'this' and the second-person singular possessive suffix point to the aforementionedness of the child referred to (see Section 10.3 for patterns of reference tracking). Only a singular reading is available since it is contextually established that there is only one child. Example (176) is about a specific child known to the speaker; combined with the numeral *bir* 'one', only a singular reading is available again.

- (175) *Bu ogo-ŋ ma-ni ist-er da, [...].*
this child-POSS.2SG this-ACC hear-PRS.3SG and
 'This child hears it, [and he kills Lyypyrdaan, too].'
 (ChuAE_1968_Lyypyrdaan_flk.085)

- (176) *Bir tula:jak ogo bar, [...].*
one orphan child EX
 'There is a certain orphan child, [completely baldheaded, he lived with his lonely mother and had one reindeer].'
 (BeVP_1970_BaldheadedOrphanBoy_flk.057)

Underspecified number forms are more complex to analyze. According to Corbett (2000: 10), they express the meaning of the relevant nominal without reference to number. This means that either a singular or a plural reading is possible in the given context, but the linguistic expression is underspecified in this regard. In example (177), the noun *d'ie* 'house' can, thus, refer to one or many houses.

- (177) *D'ie da tup-put-a.*
house and build-PST2-3SG
 'And he built a house.' ~ 'And he built houses.'
 (KiPP_NN2_2009_Family_nar.KiPP.040)

Only from the context it can become clear that the latter reading is intended since the speaker is talking about her husband's occupation in the past years.

Not all kinds of nominals exhibit forms underspecified for number. Concerning animacy and the *animacy hierarchy* (Comrie 1989: 185–200), the following can be said: Nouns denoting inanimates, animates, and to a certain extent, humans have underspecified number forms, whereas nouns denoting kins, as well as personal pronouns, do not. The examples (178) and (179) show nouns denoting an animate and a human referent, respectively, underspecified for number.

- (178) *Ol delemiçe: ü:r-en ih-er.*
 that **free.running.domestic.reindeer** hunt-CVB.SEQ go.AUX-PRS.3SG
 ‘He is driving a free-running domestic reindeer.’ ~ ‘He is driving free-running domestic reindeer.’
 (BoND_1964_ThreeBrothers_flk.154)
- (179) *D’aktar buōllagina er kihi tayah-in*
woman EMPH man human clothes-POSS.3SG.ACC
teps-er, [...].
 step-PRS.3SG
 ‘[When] a woman steps onto male clothes, [it is also a sin].’ ~ ‘[When] women step onto male clothes, [it is also a sin].’
 (KiPP_2009_Belief_nar.KiPP.005)

Neither from a turcological nor an areal perspective is this phenomenon surprising. Johanson (1998a: 51) states that in Turkic languages, “[t]he singular has a broad, partly number-indifferent range of use [...]”. This pattern matches the situation described for Dolgan exactly. Additionally, Däbritz (2021b) shows from an areal perspective that nominal forms underspecified for number are rather common than exceptional in Northern Siberian languages.

It seems reasonable to account for paired nouns as well as unmarked nouns after quantifiers and numerals likewise (see Däbritz 2021b for a detailed discussion). Paired nouns such as *ili* ‘hand; arm’, *atak* ‘foot; leg’ or *karak* ‘eye’ most often occur in forms underspecified for number in Dolgan, as can be seen in the examples (180) and (181) (for plural occurrences see Section 4.1.2).

- (180) *Tüh-er kar, honnokon ir-er karag-in*
 fall-PRS.3SG snow immediately melt-PRS.3SG **eye-POSS.3SG.ACC**
him-teg-ine.
 close.eyes-TEMP-3SG
 ‘Snow is falling, it immediately melts when he closes his eyes.’
 (AsKS_19XX_Amulet_nar.012)

- (181) *İli-tin* *çip-ta:bit-tar,* *pal'is'ejskij-dar*
hand-POSS.3SG.ACC chain-VBZ-PST2-3PL policeman-PL
ill-e *tur-al-lar.*
 take.away-CVB.SIM stand.AUX-PRS-3PL
 'They have chained his hands, the policemen are taking [him] away.'
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.152)

It stands to reason that the underspecified number form refers to the whole pair since it is semantically the least marked reading: Eyes, hands and legs more often appear as a pair and not as single items. This explanation is corroborated by the fact that one single item of a pair is marked with the modifier *aṇar* 'half', like in example (182).

- (182) [...] *onto aṇar karak-ta:k e-bit.*
 then **half eye-PROPR** be-PST2.3SG
 '[That girl looks around], apparently, she had only one eye.'
 (BaA_1930_OneEyedGirl_flk.013)

Also, after cardinal numerals and quantifiers, underspecified number forms are used almost without exception. In this domain, the explanation holds that the quantifying modifier already points to a singular (in the case of '1') or a plural (in all other cases) reading. Therefore, number has not to be expressed at the nominal itself. The examples (183) and (184) show underspecified number forms after cardinal numerals, and example (185) shows an underspecified number form after a quantifier.

- (183) *Hutka-ga* *tüört, tüört holkuobaj.*
 day.and.night-DAT/LOC four **four rouble**
 'On a day four, four roubles.'
 (ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.050)
- (184) *Hürbe ikki kal'lekt'iv ba:r e-t-e.*
twenty two collective EX be-PST1-3SG
 'There were twenty-two collectives.'
 (UkOA_2010_Festival_nar.UkOA.035)
- (185) *Tüök elbek o:n'n'ur egel-beteg-im.*
 what **many toy** bring-NEG.PST2-1SG
 'I did not bring many toys.'
 (UkET_AkEE_19940424_SongsTales_conv.UkET.041)

4.1.2 Plural

The plural is the only marked number value in Dolgan. It is expressed by the suffix -LAr, which is the same form as in most Turkic languages. It is attached directly to the stem, has vowel harmonic forms and leads to regular consonant assimilations (see Section 2.5). Consequently, the suffix has the 16 allomorphs displayed in Chart 35.

CHART 35 Allomorphs of the plural marker

Preceding environment	Allomorphs
V, C _{+voice} , +lat	-lar, -ler, -lor, -lör
C _{+voice} , -nas, -lat	-dar, -der, -dor, -dör
C _{+voice} , +nas	-nar, -ner, -nor, -nör
C _{-voice}	-tar, -ter, -tor, -tör

The following list exemplifies the plural forms of regular nouns, which applies to a great deal of the Dolgan nouns.

taba ‘reindeer’ + -LAr → *tabalar* ‘reindeer’
börö ‘wolf’ + -LAr → *börölör* ‘wolves’
at ‘horse’ + -LAr → *attar* ‘horses’
kötör ‘bird’ + -LAr → *kötördör* ‘birds’
ilim ‘net’ + -LAr → *ilimner* ‘nets’

However, there are some seemingly irregular forms. Many stems ending with -n show either the expected form of the suffix -nAr, or the assimilation of the stem-final *n*, yielding -t-tAr. The most frequent lexemes are as follows.

dulga:n ~ *dalga:n* ‘Dolgan’ + -LAr → *dulga:ttar* ~ *dalga:ttar* ~ *dulga:nnar*
 ~ *dalga:nnar*
eme:ksin ‘old woman’ + -LAr → *eme:ksitter* ~ *eme:ksinner*
kergen ‘family; parents’ + -LAr → *kergetter* ~ *kergenner*
ojun ‘shaman’ + -LAr → *ojuttar* ~ *ojunnar*
tojon ‘lord’ + -LAr → *tojonnor* ~ *tojottor*

Additionally, the possessive pronouns (see Section 3.3.1) and diminutive nouns formed by the suffix -kA:N (see Section 12.1) are concerned.

miniēne ‘my.SG’ → *miniēnnere* ~ *miēnnere* ~ *miniēttere* ~ *miēttere* ‘my.PL’
tabaka:n ‘small reindeer’ + -LAR → *tabaka:ttar* ~ *tabaka:nnar*

The same pattern can be observed at stems ending with *r*, the most frequent being the following.

dogor ‘friend’ + -LAR → *dogottor* (instead of expected **dogordor*)
ogonn’or ‘old man’ + -LAR → *ogonn’ottor* (instead of expected **ogonn’or-dor*)
d’aktar ‘woman’ + -LAR → *d’aktattar* (instead of expected **d’aktardar*)¹

Except for the possessive forms of personal pronouns and the diminutive nouns, these items have in common that they designate humans. Moreover, many of them are loanwords from Ewenki (*dulga:n* ~ *dalgan* ‘Dolgan’, diminutive suffix) or Mongolic (*dogor* ‘friend’, *eme:ksin* ‘old woman’, *kergen* ‘family; parents’, *tojon* ‘lord’).

The latter is essential since Kałużyński (1961: 116) explains this variation by Mongolic substrate influence. Modern Mongolian has the plural marker *-d* (< **-t*), which is attached to stems ending with nasals and liquids (i.e. *n*, *l* and *r* in modern Mongolian), e.g. Mongolian *shouboo-d* ‘bird-PL’ (< *shouboon* ‘bird’) (Janhunen 2012: 99). According to Kałużyński (1961: 116), etymologically Mongolic items like *kergen* ‘family; parents’ or *tojon* ‘lord’ exhibit double plural marking in Sakha, namely Mongolic **-t* and Turkic *-LAR, e.g. *kerge-t-ter* ‘family-PL-PL’. Due to both formal and semantic analogy, this pattern was apparently adapted to other stems, too. It has to be remarked that Kałużyński (1961) undoubtedly discusses Sakha, not Dolgan. Still, his conclusions can be transferred to Dolgan since 1) the morphonology of the plural marker is the same in both languages and 2) Mongolic substrate influence can in either case only be assumed for a time when Dolgan and Sakha had not separated yet (see Sections 1.2, 1.3 and 11.2.1.1 for details).

Therefore, the given explanation seems to be plausible for the Dolgan pattern as well. Moreover, the underlying process of analogic adaptation is evidently not finished yet since even very young Russian items (here *dūōktur* ‘doctor’) in Dolgan speech behave likewise.

- (186) *Oččogo dūōktu:t-tar-iŋ* *hild'-a:čči-lar*.
 then **doctor-PL-POSS.2SG** go-HAB-3PL
 ‘At that time the doctors went around [in the tundra].’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.078)

¹ Here also the form *d’aktallar* occurs, but much more seldom.

The plural form of the lexeme *uōl* ‘boy; son’ is *uōlattar*, which again can be explained by double Mongolic-Turkic plural marking yielding the segmentation *uōl-at-tar* ‘boy-PL-PL’. The lexeme *ki:s* ‘girl; daughter’ has the partly suppletive plural form *kirgittar*. This form goes back to the nowadays vanished stem **qirqin* ‘female slave; concubine; maidservant’ (ESTYa VI 2000: 238–239), again suffixed with both the Mongolic plural marker **-t* and the Turkic plural marker **-LAR*.

Coming to semantics, the plural—opposed to the singular—refers to more than one entity.

- (187) *Kutujak ol talak-tar-ga hü:r-d-e.*
 mouse that **bush-PL-DAT/LOC** run-PST1-3SG
 ‘The mouse ran to(wards) those bushes.’
 (AkEE_19900810_ReindeerMouse_flk.012)

In the case of paired nouns, plural forms are used very rarely and only by fully bilingual speakers. As was shown in Section 4.1.1, underspecified number forms are much more frequent. Nevertheless, an example of a paired noun marked for plural is given here.

- (188) [...] *ili:ler-i-nen isten-e tün olor-o:čču.*
hand-PL-POSS.3SG-INS sew-CVB.SIM at.night sit-HAB.3SG
 ‘[The education of the children, everything was the woman’s, breast-feeding her children with her bosoms], sewing with her hands she was sitting at night.’
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.034)

To sum up the core meanings of the plural, one can state the following: Whereas the absence of the plural suffix not necessarily entails a singular reading, its presence always predicts a plural reading, i.e. reference to more than one entity.

Finally, the plural suffix can express associative plurals when attached to proper nouns. In this case, the named person and some people belonging to them are referred to. In example (189), it is expressed that Onosko and his people, as well as some other people, got help, not that there were several “Onoskos”.

- (189) *Iti Onosko-lor-go-tuōk-tar-ga kömölös-püt-tere [...].*
 that **Onosko-PL-DAT/LOC-what-PL-DAT/LOC** help-PST2-3PL
 ‘They had helped this Onosko and his people and so on, [...].’
 (BeES_1997_HistoryOfKatyryk_nar.054)

4.2 Case

4.2.1 Case Inflection

The case system of Dolgan is mid-sized from a typological perspective (see Iggesen 2013), exhibiting eight cases: nominative, accusative, genitive, partitive, dative-locative, ablative, instrumental, comparative. Chart 36 shows the suffixes of the named cases.

CHART 36 Case inflection

	Morpheme	Allomorphs
Nominative	–	–
Accusative	-(n)I ~ POSS- <i>n</i>	<i>-ni, -ni, -nu, -nü</i> <i>-i, -i, -u, -ü</i> POSS- <i>n</i> (in possessive declension)
Genitive	POSS- <i>n</i>	POSS- <i>n</i> (in possessive declension)
Partitive	-TA	<i>-ta, -te, -to, -tö</i> <i>-da, -de, -do, -dö</i> <i>-na, -ne, -no, -nö</i>
Dative- locative	-GA ~ -gAr ~ -r	<i>-ga, -ge, -go, -gö</i> <i>-ka, -ke, -ko, -kö</i> <i>-ŋa, -ŋe, -ŋo, -ŋö</i> <i>-gar, -ger, -gor, -gör</i> (after possessive suffixes: 3SG, 1PL, 2PL, 3PL) <i>-r</i> (after possessive suffixes: 1SG, 2SG)
Ablative	-(t)tAn	<i>-ttan, -tten, -tton, -ttön</i> <i>-tan, -ten, -ton, -tön</i>
Instrumental	-(n)nAn	<i>-nnan, -nnen, -nnon, -nnön</i> <i>-nan, -nen</i>
Comparative	-TA:gAr	<i>-ta:gar, -te:ger, -to:gor, -tö:gör</i> <i>-da:gar, -de:ger, -do:gor, -dö:gör</i> <i>-na:gar, -ne:ger, -no:gor, -nö:gör</i>

Before coming to functional perspectives, some formal comments are in order. First, the genitive case merely occurs in combination with possessive suffixes, and it is always homonymous with the possessive accusative case. Both features can be explained diachronically (see Section 4.3.2). Second, the dative-locative case has different suffixes for non-possessive and possessive nouns; the latter

The suffix -LI:N is frequently called “comitative case” in existing grammatical descriptions. However, its usage is—in contrast to Sakha—marginal. One of the core comitative meanings, the expression of accompaniment, is not expressed by the suffix -LI:N but by the postposition *gitta ~ kitta* ‘with’. Therefore, the suffix is labelled “sociative” rather than “comitative” here. As for its categorical status, it behaves hardly like a case suffix: On the one hand, it does not seem to have a fixed position in the word ((191) vs (192)), and on the other hand, it can be combined with the accusative case (193).

- (191) *D'îe-lî:n-ner ör kepset-el-ler?*
 house-SOC-PL long chat-PRS-3PL
 ‘Do the people of the house [lit. the ones with the house] chat for a long time?’
 (BeEI_KuNS_1998_Teacher_conv.BeEI.177)
- (192) *Vinuk-tar-dî:m-mîn.*
 grandchild-PL-SOC-1SG
 ‘I am with my grandchildren.’
 (KiPP_2009_Belief_nar.KiPP.046)
- (193) *Korûopka-ni kuôska-lî:n-i biêr-dek-kine, keps-îe-m!*
 box-ACC cat-SOC-ACC give-COND-2SG tell-FUT-1SG
 ‘If you give me the box together with the cat, I will tell!’
 (ErSV_1964_WarBirdsAnimals_flk.271)

Therefore, it is not treated as a case suffix here but as a derivational suffix expressing sociative rather than comitative meanings (see Section 12.1.1 for a detailed account).

Finally, there is the frequent similitive suffix -LI:. Though seldom, there are some examples where the suffix behaves morphosyntactically like a case suffix, e.g. because it follows the plural in the word *ogolordu*: ‘like children’ in example (194).

- (194) *Gini bari ogo-lor-du: ehe-tin,*
 3SG.PRO all child-PL-SIM grandfather-POSS.3SG.ACC
ebe-tin olus han-î:r, [...].
 grandmother-POSS.3SG.ACC very appreciate-PRS.3SG
 ‘She, like all children, appreciates her grandfather and grandmother very much, [...].’
 (PoNA_200X_GirlFromTundra_nar.070)

Despite this case-like behaviour, the similitive suffix is treated here as a derivational suffix. The reason for this is, on the one hand, that its functional domain is limited and, on the other hand, that it cannot be combined with possessive suffixes according to the material analyzed here.

Hence, there are eight cases in Dolgan (nominative, accusative, genitive, partitive, dative-locative, ablative, instrumental and comparative). Moreover, there are two forms (sociative and similitive), which sometimes are or could be regarded as case suffixes but are treated here as derivational suffixes, as explained above.

To illustrate the formation of case forms, Chart 37 shows the paradigm of the nouns *taba* 'reindeer', *it* 'dog', *küöl* 'lake' and *kün* 'sun; day'.

CHART 37 Examples of case inflection

	<i>taba</i> ‘reindeer’	<i>it</i> ‘dog’	<i>küöl</i> ‘lake’	<i>kün</i> ‘sun; day’
		Singular		
Nominative	<i>taba</i>	<i>it</i>	<i>küöl</i>	<i>kün</i>
Accusative	<i>tabani</i>	<i>iti</i>	<i>küölü</i>	<i>künü</i>
Partitive	<i>tabata</i>	<i>itta</i>	<i>küölle</i>	<i>künne</i>
Dative-locative	<i>tabaga</i>	<i>ikka</i>	<i>küölge</i>	<i>künge</i>
Ablative	<i>tabattan</i>	<i>ittan</i>	<i>küölten</i>	<i>küntən</i>
Instrumental	<i>tabannan</i>	<i>itinan</i>	<i>küöllinen</i>	<i>kününen</i>
Comparative	<i>tabata:gar</i>	<i>itta:gar</i>	<i>küölde:ger</i>	<i>künne:ger</i>
		Plural		
Nominative	<i>tabalar</i>	<i>ittar</i>	<i>küöllər</i>	<i>künner</i>
Accusative	<i>tabalari</i>	<i>ittari</i>	<i>küölləri</i>	<i>künneri</i>
Partitive	<i>tabalarda</i>	<i>ittarda</i>	<i>küöllərde</i>	<i>künnerde</i>
Dative-locative	<i>tabalarga</i>	<i>ittarga</i>	<i>küöllerge</i>	<i>künnerge</i>
Ablative	<i>tabalartan</i>	<i>ittartan</i>	<i>küöllerten</i>	<i>künnerten</i>
Instrumental	<i>tabalarinan</i>	<i>ittarinan</i>	<i>küöllərinen</i>	<i>künnerinen</i>
Comparative	<i>tabalarda:gar</i>	<i>ittarda:gar</i>	<i>küöllərde:ger</i>	<i>künnerde:ger</i>

4.2.2 Case Functions

4.2.2.1 Nominative

Nouns in the unmarked nominative case can fulfil nearly all syntactic functions. The most important function is being the subject of a clause.

- (195) *B'ir ogo-m* *iti uškuwōla-ga* *ūlel-ir,* [...].
one child-POSS.1SG.NOM that school-DAT/LOC work-PRS.3SG
 ‘One child of mine works in the school, [one daughter of mine works as a director].’
 (UkET_AkEE_19940424_SongsTales_conv.UkET.004)

Also, direct objects can appear in the nominative if the direct object is positioned immediately before the verb. A direct object in the nominative is indefinite and often non-specific or generic; additionally, it tends to form a unit of meaning together with the verb.

- (196) [...] *bert baskūoj irā illa-bit-a.*
 very beautiful **song.NOM** sing-PST2-3SG
 ‘[I remember one of his songs], he sang a very beautiful song.’
 (ElBK_KuNS_2004_Storytellers_conv.ElBK.059)

- (197) *Karči* *oŋost-ol-lor.*
money.NOM make-PRS-3PL
 ‘They are making money.’
 (ChSA_KuNS_2004_ReindeerHerdIng_conv.ChSA.078)

If the possessor is a full noun phrase in adnominal possessive constructions, it takes the nominative case (except for double possessive constructions, see Section 4.2.2.3).

- (198) *Ol ali-ga kolxoz üör-e ah-ir.*
 that valley-DAT/LOC **kolkhoz.NOM** herd-POSS.3SG eat-PRS.3SG
 ‘In that valley, the herd of the kolkhoz is grazing.’
 (AsKS_19xx_Amulet_nar.049)

Finally, some postpositions govern the nominative case of non-possessed nouns, the most frequent being *ihin* ‘because (of)’, *kördük* ‘like’ and *üstün* ‘through; along’ (see Section 3.7).

- (199) [...] *bir taba ihin hut-ta:-čči*
 one reindeer.NOM because.of court-VBZ-PTCP.HAB
e-ti-lere kihi-ler-i ran'se.
 AUX-PST1-3PL human-PL-ACC earlier
 '[Of course, earlier it was strict], because of [killing/stealing] one rein-
 deer people were judged earlier.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.161)

- (200) *Huku:j ka:r kördük çe:lke: buöl-lun.*
 long.coat **snow like** white be-IMP.3SG
 ‘The coat shall be as white as snow.’
 (PoNA_2004_SnowOwl_flk.048)
- (201) *Hati: kel-e:čči e-ti-ler e kitil üstün.*
 by.foot come-PTCP.HAB AUX-PST1-3PL **shore along**
 ‘They always came by foot along the shore.’
 (BeEI_KuNS_1998_Teacher_conv.BeEI.038)

4.2.2.2 Accusative

The primary function of the accusative case is to mark the direct object of a clause. However, direct objects are not necessarily marked with the accusative case since Dolgan exhibits differential object marking. The exact conditions and mechanisms of differential object marking are described in Section 8.1.3. Here it can already be stated that the accusative case is the most frequent case for direct objects: Ca. 81% of direct objects in the analyzed material show accusative case marking.

- (202) *Onno bir kihi-ni bul-lu-but.*
 there one **human-ACC** find-PST1-1PL
 ‘There, we found one man.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.059)
- (203) *Bu emiê aña:r ili-tin bis-t-a.*
 this also other **hand-POSS.3SG.ACC** cut-PST1-3SG
 ‘She cut off her other hand, too.’
 (FeA_1931_OldWomanFoxFur_flk.041)

Additionally, some postpositions govern the accusative case, the most important being *gitta ~ kitta* ‘with’. Adpositional phrases formed with *gitta ~ kitta* are among the central devices to express the semantic role *accompaniment*, as displayed in examples (204) and (205).

- (204) *Ol ogo-ko:t-tor-bun gitta, tüört ogo-lo:k*
 that **child-DIM-PL-POSS.1SG.ACC** **with** four child-PROPR
e-ti-m, onton iti.
 be-PST1-1SG then that
 ‘With my little children, I had four children, then.’
 (SuON_KuNS_19990303_HardLife_conv.SuON.233)

- (205) *Bilir üje-ge andagaj til-la:k-tar kurpa:ska-ni*
 long.ago time-DAT/LOC sworn word-PROPR-3PL partridge-ACC
kitta.
 with
 ‘In olden times, they [= the pikes] had a contract with the partridges.’
 (ErSV_1964_WarPartridgesPikes_flk.018)

Other postpositions, which govern the accusative case, are *biha* ‘during; over’ and *meld’i* ‘during’.

- (206) *D’il-i biha îald’i-bit-im.*
 year-ACC during be.ill-PST2-1SG
 ‘I was ill for a year.’
 (ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.005)
- (207) *Kihin-i meld’i utuj-bup-pun ebit.*
 winter-ACC during sleep-PST2-1SG EVID
 ‘I slept apparently during the [whole] winter.’
 (AkEE_19XX_BoySister_flk.156)

4.2.2.3 Genitive

As mentioned above, the middle part of a double adnominal possessive construction (X’s Y’s Z) may show genitive case marking. In the third person, this is obligatory; in the first and second person, this is uncommon but possible. In simple adnominal possessive constructions (X’s Y), the genitive is not used for indicating the possessor. In example (208), all these patterns occur: *erim* ‘my husband’ is a first-person possessor in a double possessive unmarked for case, whereas *baltitîn* ‘his younger sister’ is a third-person possessor in a double possessive exhibiting genitive case morphology. Finally, *min* ‘I’ is a first-person possessor in a simple possessive and is thus unmarked for case.

- (208) *Er-im balti-tin*
 husband-POSS.1SG younger.sibling-POSS.3SG.GEN
ogo-lor-o iti bar-a:čči-lar oŋuōk-tar-ga min
 child-PL-POSS.3SG this go-HAB-3PL tomb-PL-DAT/LOC 1SG.PRO
ogo-lor-bun kitta.
 child-PL-POSS.1SG.ACC with
 ‘The children of my husband’s younger sister usually go to the cemetery with my children.’
 (KiPP_2009_Belief_nar.KiPP.093)

This also applies to contexts where the possessive suffix at the relevant item (Y) is used in a non-possessive function, e.g. expressing aforementionedness. Example (209) shows this since *ogotun* has no possessor here, but the possessive suffix of the third person singular points to its information status *given* (see Section 10.3). Nevertheless, it is treated morphosyntactically like the middle item of a double adnominal possessive construction.

- (209) *Ol ogo-tun in'e-tin hu:j-ar.*
 that **child-POSS.3SG.GEN** mother-POSS.3SG.ACC wash-PRS.3SG
 'She [= the midwife] washes the child's mother.'
 (SuAA_20XX_Birth_nar.066)

4.2.2.4 Partitive

The single function of the partitive case is to mark direct objects. However, it is used much less frequently than the accusative and nominative cases. Only ca. 2% of direct objects in the analyzed material are marked with the partitive case. Objects marked with the partitive case can express a part-whole-relation, an indefinite amount of something, but can also be merely indefinite. In example (210), the addressee shall pay some money to the blacksmith, thus, a part of all his money. In example (211), on the contrary, no part-whole-relation is expressed since the speaker only promises to bring some ermine, but not some amount of ermines.

- (210) *Kuzn'es-ka-r karči-ta töl-üö-η.*
 blacksmith-POSS.2SG-DAT/LOC **money-PART** pay-FUT-2SG
 'You will pay money to the blacksmith.'
 (PoNA_19900322_PoorBoyDevil_flk.038)

- (211) *Ti:nna:k goronüök-ta egeł-îe-m, kü:t-en*
 alive **ermine-PART** bring-FUT-1SG wait-CVB.SEQ
olor.
 sit.AUX.IMP.2SG
 'I will bring a living ermine, wait.'
 (AsKS_19XX_Amulet_nar.029)

According to Artem'ev (1999b: 109), the partitive case marks the indefiniteness of an object. Indeed, the overwhelming majority of objects marked with the partitive case are indefinite, but this does not mean that indefinite objects necessarily have to be marked with the partitive case (see Section 8.1.3 for details). Moreover, Artem'ev (1999b: 111) states that direct objects marked with

the partitive case frequently occur with possessive suffixes, especially in the first and second person. In this case, the partitive case would point to a beneficiary referred to with the possessive suffix like in example (212).

- (212) *Ehigi emîe ak-kîti-na kördön-ün.*
 2PL.PRO also horse-POSS.2PL-PART search-IMP.2PL
 'You also search a horse for yourselves.'
 (Artem'ev 1999b: 111; own transliteration and glossing)

Only five instances of the partitive case in possessive declension (all third person singular) could be found in the analyzed corpus material. In none of them any benefactive meaning is conveyed. In example (213), the first-person speaker says that he and his companion will take two horses; therefore, the indication of a third-person beneficiary is implausible here.

- (213) *Ikki at hîrga-tî-na as-ta ild'-îek-pit.*
 two horse sledge-POSS.3SG-PART food-PART carry-FUT.1PL
 'We will take along two horse sledges [full of] food.'
 (MiAI_1964_OldPeasantOldWoman_flk.058)

Given such examples, the material analyzed here cannot support Artem'ev's claim of a benefactive meaning of objects marked with the partitive case. Formally, the partitive case often occurs with predicates in the imperative mood (214). Moreover, some verbs in the indicative future (215) and necessitative constructions (216) govern a partitive object.

- (214) *Oñor-uñ kömüs ilîm-ne, kömüs tî-ta, kömüs*
 make-IMP.2PL gold net-PART, gold small.boat-PART gold
erdi-te.
 oar-PART
 'Make a golden net, a small golden boat and golden oars.'
 (ChPK_1970_ThreeBoys_flk.020)
- (215) *L'uboj irîâ-ta ill-îâ-m, be:be.*
 random song-PART sing-FUT.1SG wait
 'I will sing a random song, wait.'
 (UkET_AkEE_19940424_SongsTales_conv.UkET.050)

- (216) *He:, bu taba:k-ta birag-îāk-kin na:da.*
 AFF this **tobacco-PART** throw-PTCP.FUT-POSS.2SG.ACC need.to
 ‘Yes, one has to throw tobacco [onto the grave].’
 (KiPP_2009_Belief_nar.KiPP.102)

Apart from the indefiniteness of the objects, these sentences—and the other instances in the corpus—have in common that the event described is not accomplished yet or has not even begun. Bearing this in mind, it is not surprising that the constructions observed are the imperative and necessitative moods and future tense, as displayed in (214) to (216). Finally, the use of the partitive case is apparently not obligatory in such contexts. Similar examples in the nominative or accusative case can also be found, as is shown in the relevant sections in Chapter 8.

4.2.2.5 Dative-Locative

The dative-locative case has two major functional domains in Dolgan: The expression of both dynamic and stative location and the expression of recipients. Historically, the suffix of the dative-locative case -GA goes back to the Proto-Turkic dative case suffix *-KA (Johanson 2021: 464), whereas the Proto-Turkic locative suffix *-DA synchronically is represented by the partitive suffix -TA in both Dolgan and Sakha (Johanson 2021: 466–467). The former item has taken over the locative functions from the latter item; consequently, Dolgan -GA has both dative and locative functions.

The first significant domain of the dative-locative case is to express spatial relations. The expression of dynamic location, i.e. the expression of the semantic role *goal*, can easily be shown with examples like (217).

- (217) *Onton Valačanka-ga i:p-pit-tara.*
 then **Volochanka-DAT/LOC** send-PST2-3SG
 ‘Then they sent [me] to Volochanka.’
 (PoPD_KuNS_2004_Life_conv.PoPD.019)

The same holds for the expression of stative location, i.e. the semantic role *locus* ~ *location* like in example (218).

- (218) *D'e min töröi-büt-üm Ava:m-ŋa.*
 well 1SG.PRO be.born-PST2-1SG **Avam-DAT/LOC**
 ‘Well, I was born in Ust'-Avam.’
 (PoPD_KuNS_2004_Life_conv.PoPD.001)

In a more abstract sense, the dative-locative case also expresses temporal relations.

- (219) *D'eŋke küŋ-ŋe* *pastux-tar* *d'ie-lere*
 clear day-DAT/LOC shepherd-PL house-POSS.3PL
 köst-ö *hit-a:čči-lar.*
 be.visible-CVB.SIM lie.AUX-HAB-3PL
 'On a clear day, the shepherds' houses are visible.'
 (AsKS_19XX_Amulet_nar.052)

The second important domain of the dative-locative case is to express the recipient of both physical and mental transfer of objects. The recipient of physical transfer is usually the third argument of prototypical ditransitive verbs (220), whilst the recipient of mental transfer is most often the third argument of speech verbs (221).

- (220) *"Ebe, enie-ke* *d'ie* *bieŋ-iek-pit,* *d-iŋ,* [...].
 granny 2SG.PRO-DAT/LOC house give-FUT-1PL say-PRS.3SG
 "Granny, we will give you an apartment", she says, ["we will help", she says].'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.233)

- (221) *Li:bira* *ogo-lor-go* *die-bit:* [...].
 Lyybyra child-PL-DAT/LOC say-PST2.3SG
 'Lyybyra said to the children: ["Children! Let me down!"].'
 (PoS_PrG_1964_Lyybyra_flk.046–048)

Finally, the two postpositions *dieri* 'until; up to' and *tali* 'like; similar' govern the dative-locative case (see Section 3.7).

- (222) *Krasnajakaj-ga* *e:* *dieri* *bar-bit-im* *"Spartak"*
 Krasnoyarsk-DAT/LOC eh until go-PST2-1SG Spartak
 paraxot-i-nan.
 steamer-POSS.3SG-INS
 'Until, eh, Krasnoyarsk, I went on the steamer "Spartak".'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.005)

- (223) *Hette uōn biēs-te:k-ke dīeri ülele:-bit-im onno,*
 seven ten five-PROPR-DAT/LOC until work-PST2-1SG there
Valačanka-ga.
 Volochanka-DAT/LOC
 ‘Until [19]75, I worked there, in Volochanka.’
 (PoPD_KuNS_2004_Life_conv.PoPD.058)
- (224) *Br’ezn’ev-ka tali e-t-e.*
 Brezhnev-DAT/LOC similar be-PST1-3SG
 ‘He was [as old] as Brezhnev.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.072)

4.2.2.6 Ablative

The ablative case expresses primarily spatial relationships. It denotes dynamic location, i.e. the movement of something, more precisely, the source of the movement of something.

- (225) *Onno Tajmī:r-tan bihigi bar-bip-pit ikki kihi.*
 thither Taimyr-ABL 1PL.PRO go-PST2-1PL two person
 ‘From Taimyr, we went there [with] two people.’
 (UkOA_2010_Festival_nar.UkOA.003)

The ablative case can also express the source of movement more abstractly. This can be the source of physical transfer, i.e. the counterpart of a recipient (226), or the source of information in mental transfer (227). In this context, it is worth mentioning that the verbs *ijit-* ‘ask’ and *kördö:-* ‘beg’ govern the ablative case for expressing the addressee of the question (228).

- (226) *Min’igi-tten tuōk-pun il-iāk-tara=j?*
 1SG.PRO-ABL what-POSS.1SG.ACC take-FUT-3PL=Q
 ‘What will they take from me?’
 (ChPK_1970_Nganasan_flk.019)
- (227) *Radima-ttan ist-e:čči-bit.*
 Radio-ABL hear-HAB-1PL
 ‘We heard it from the radio.’
 (ElBK_KuNS_2004_Storytellers_conv.ElBK.082)

- (228) *“Oksiē, ebe-gi-tten ispi:ske-te körd-ü:*
 Oksana **grandmother-POSS.2SG-ABL** match-PART beg-CVB.SIM
bar da, diē-t-e.
 go.IMP.2SG EMPH say-PST1-3SG
 ‘“Oksana, go and ask your grandmother for matches”, she said.’
 (BeAM_199X_LegendSpiritOfTrees_nar.091)

Existing descriptions of Dolgan state that the ablative case can denote the material out of which some item is made (Li 2011: 65–66; Artem’ev 2013b: 84). However, the INEL Dolgan Corpus cannot confirm this observation—instead, the instrumental case (see Section 4.2.2.7) seems to fulfil this function.

Two related and even more abstract domains of the ablative case are the following: First, the ablative can express the reason for an event or the motivation for an action performed (229). Second, the ablative can express the standard of comparison (230). This is unexpected since Dolgan also knows a comparative case (see Section 4.2.2.8) that exactly covers this domain. The functional complex of comparison is discussed in detail in Section 8.2.5.

- (229) *Tur-ari gim-mit-a, honno tüs-t-e*
 stand.up-CVB.PURP want-PST2-3SG immediately fall-PST1-3SG
atag-in iari-ti-ttan.
 foot-POSS.3SG.GEN **pain-POSS.3SG-ABL**
 ‘He wanted to stand up, [but] immediately he fell because of the pain [in] his foot.’
 (AsKS_19XX_Amulet_nar.180)
- (230) *Kör-büt-e, bir d’iē bari-lari-ttan ulakan.*
 see-PST2-3SG one house **all-POSS.3PL-ABL** big
 ‘He looked: one house is bigger than all [others].’
 (BoND_1964_ThreeBrothers_flk.047)

Finally, two postpositions govern the ablative case: *taksa* ‘over; more than’, which is grammaticalized from *tagis-* ‘go out’ + -A ‘CVB.SIM’, and *tuspa* ‘besides; apart from’ (see Section 3.7).

- (231) *Hürbe-tten taksa kihi-ni tüh-er-di-ler.*
 twenty-ABL **more.than** person-ACC fall-CAUS-PST1-3PL
 ‘They shot down more than twenty people.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.047)

- (232) *Itin-ten tuspa Valačanka-ttan kel-er*
that-ABL besides Volochanka-ABL come-PTCP.PRS
būōl-uōk-tara MRS ülehít-ter-e.
 become.AUX-FUT-3PL MRS worker-PL-POSS.3SG
 ‘Apart from this, workers of the MRS² will come from Volochanka.’
 (PoNA_19910207_Fishing_nar.063)

4.2.2.7 Instrumental

The instrumental case has two central functions: It expresses the instrument with which an action is performed (233); similarly, the material of some item is expressed with this case (234). Besides that, the instrumental case denotes a spatial relationship correlating to the semantic role *path*, i.e. movement along or through some location ((235) and (236)) (see also Stachowski 1994 for details).

- (233) *Taba-lar-in kej-bit*
 reindeer-PL-POSS.3SG.ACC drive-PST2.3SG
kürej-i-nen.
driving.pole-POSS.3SG-INS
 ‘He drove the reindeer with his driving pole.’
 (AsKS_19XX_Amulet_nar.060)
- (234) *Kürd’ek mah-i-nan oñor-ol-lor, lapatta.*
 shovel **wood-EP-INS** make-PRS-3PL, spade.R
 ‘They make a shovel out of wood, a spade.’
 (BeAM_199X_LegendSpiritOfTrees_nar.150)
- (235) *D’aktal-lar ij-bit hüōl-u-nan bar-an*
 woman-PL show-PTCP.PRS **path-POSS.3SG-INS** go-CVB.SEQ
ka:l-bit-tar.
 stay.AUX-PST2-3PL
 ‘The women went along the path which they had been shown.’
 (YaP_1930_MastersOfPox_flk.006)

² MRS is an abbreviation and stands for Russian *motorno-rybolovnaja stancija* ‘motor-fishing station’.

- (236) *Uska:n ojun-a* *kis* *mas-tan*
 hare shaman-POSS.3SG winter wood-ABL
ûôleh-i-nen *oj-or,* [...].
 chimney-POSS.3SG-INS jump-PRS.3SG
 ‘The shaman hare jumps from the winter wood through the chimney,
 [the hare’s wife also jumped through the chimney].’
 (ErSV_1964_OldManHares_flk.054)

4.2.2.8 Comparative

The single function of the comparative case is expressing the standard of comparison. This holds in both adjectival (237) and adverbial (238) comparison.

- (237) *U:* *ičči-te* *minigin-ne:ger* *kubulgat-a* *hūō*
 water master-POSS.3SG 1SG.PRO-COMP sly-POSS NEG
būōl-iūō, *badaga.*
 be-FUT.3SG probably
 ‘The master of water is probably not slyer than me.’
 (AkEE_19900810_PearlBeard_flk.061)

- (238) *“It-ta:gar* *da* *kuhagan-nik* *olor-o-bun*”, *d-i:r.*
 dog-COMP EMPH bad-ADVZ live-PRS-1SG say-PRS.3SG
 ‘“I live even worse than a dog”, she says.’
 (AkEE_19900810_GirlAnys_flk.020)

Nevertheless, the standard of comparison can be expressed with the ablative case, too (see Section 4.2.2.6). In Section 8.2.5, the comparison of adjectives and comparative clauses are described in detail.

4.3 Possession

4.3.1 Possessive Suffixes

Like all other Turkic languages and most other languages of Northern Eurasia, Dolgan exhibits a set of possessive suffixes, which synthetically express the person and number of the possessor in adnominal possessive constructions. Chart 38 shows the forms of the possessive suffixes in Dolgan.

CHART 38 Possessive suffixes

	Morpheme	Allomorphs
1SG	-(I)m	-m -im, -im, -um, -üm
2SG	-(I)ŋ	-ŋ -iŋ, -iŋ, -uŋ, -üŋ
3SG	-(t)A	-ta, -te, -to, -tö -a, -e, -o, -ö
1PL	-BIt	-bit, -bit, -but, -büt -pit, -pit, -put, -püt -mit, -mit, -mut, -müt
2PL	-GIt	-git, -git, -gut, -güt -kit, -kit, -kut, -küt -ŋit, -ŋit, -ŋut, -ŋüt
3PL	-LArA	-lara, -lere, -loro, -lörö -tara, -tere, -toro, -törö -dara, -dere, -doro, -dörö -nara, -nere, -noro, -nörö

When a noun is inflected for both number and possession, the possessive suffix is added after the number suffix.

- (239) *Vnuk-tar-im* *bîék* *ba:r* *bûol-al-lar*.
grandchild-PL-POSS.1SG always EX be-PRS-3PL
'My grandchildren are always there.'
(UkET_AkNN_19940424_SongsTales_conv.UkET.024)

As the third-person plural suffix -LArA historically consists of the plural marker -LAr and the possessive suffix of the third person singular -(t)A, the combination of the plural marker and the possessive suffixes of the third person leads to homonymous forms. Whereas *taba-ta* 'reindeer-POSS.3SG' unambiguously refers to one reindeer and one possessor, the form *tabalara* can refer to either one reindeer and many possessors (*taba-lara* 'reindeer-POSS.3PL') or many reindeer and one possessor (*taba-lar-a* 'reindeer-PL-POSS.3SG'). Moreover, the same form is used when both reindeer and possessors are many since the paradigmatically expectable form **taba-lar-dara* 'reindeer-PL-POSS.3PL' does not exist. Hence, sentences like in example (240) can only be disambiguated

regarding the context. Verbal morphology (third person plural) clarifies that not a single reindeer, but many reindeer are meant. However, only from the preceding context, it can be understood that a single possessor owns the reindeer. Without context, the sentence would also allow the reading ‘Their (many) reindeer were hungry’.

- (240) *Taba-lar-a* *aččik-ta-ti-lar.*
reindeer-PL-POSS.3SG hungry-VBZ-PST1-3PL
‘His (many) reindeer were hungry.’
(AkEE_19XX_BoySister_flk.134)

To illustrate the building of possessive forms, Chart 39 shows the paradigm of the nouns *taba* ‘reindeer’, *it* ‘dog’, *küöl* ‘lake’ and *kün* ‘day’.

CHART 39 Examples of possessive inflection

	<i>taba</i> ‘reindeer’	<i>it</i> ‘dog’	<i>küöl</i> ‘lake’	<i>kün</i> ‘sun; day’
Singular possessee				
1SG	<i>tabam</i>	<i>itim</i>	<i>küölüm</i>	<i>künüm</i>
2SG	<i>tabaŋ</i>	<i>itiŋ</i>	<i>küölüŋ</i>	<i>künüŋ</i>
3SG	<i>tabata</i>	<i>ita</i>	<i>küöle</i>	<i>küne</i>
1PL	<i>tababit</i>	<i>ippit</i>	<i>küölbüt</i>	<i>kümmüt</i>
2PL	<i>tabagit</i>	<i>ikkit</i>	<i>küölgüt</i>	<i>küŋgüt</i>
3PL	<i>tabalara</i>	<i>ittara</i>	<i>küöllere</i>	<i>künnere</i>
Plural possessee				
1SG	<i>tabalarım</i>	<i>ittarım</i>	<i>küöllерim</i>	<i>künnерim</i>
2SG	<i>tabalarıŋ</i>	<i>ittarıŋ</i>	<i>küöllеріŋ</i>	<i>künnеріŋ</i>
3SG	<i>tabalara</i>	<i>ittara</i>	<i>küöllere</i>	<i>künnere</i>
1PL	<i>tabalarbit</i>	<i>ittarbit</i>	<i>küöllерbit</i>	<i>künnерbit</i>
2PL	<i>tabalargit</i>	<i>ittargit</i>	<i>küöllergit</i>	<i>künnergit</i>
3PL	<i>tabalara</i>	<i>ittara</i>	<i>küöllere</i>	<i>künnere</i>

If the possessor in an adnominal possessive construction is a full noun phrase, it is expressed overtly (241). If the possessor is pronominal, it can be dropped because the possessive suffix itself establishes person-number reference (242). See Section 7.1.2.3 for a syntactic account to adnominal possession.

- (241) *Ol ali:-ga kolkhoz üör-e ah-i:r.*
 that plain-DAT/LOC **kolkhoz** herd-POSS.3SG eat-PRS.3SG
 ‘On that plain, the herd of the kolkhoz is grazing.’
 (AsKS_19XX_Amulet_nar.049)
- (242) [...] *ka:n-im ust-a hit-ar bugurduk.*
blood-POSS.1SG flow-CVB.SIM lie.AUX-PRS.3SG like.this
 ‘[Later I saw, my fingers are shivering], my blood is running like this.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.103)

Moreover, possessive suffixes occur not only in prototypical possessive contexts. The third-person plural possessive suffix may also have a selective function, as in example (243).

- (243) *Man-tan birges-tere ogonn'or ki:h-a.*
 this-ABL **the.other-POSS.3PL** old.man daughter-POSS.3SG
 ‘One of them was the old man’s daughter.’
 (BaR_1930_DaughterOfNganasan_flk.033)

Finally, possessive suffixes—primarily second and third person singular—play a role in discourse organization (see Section 10.3 for details). In example (244), the first-person speaker is talking about her own children so that the possessive suffixes can by no means express a prototypical possessive relation.

- (244) *He:, Bi:če-ŋ onno olor-or N'uku:-tun*
 AFF **Vitya-POSS.2SG** there live-PRS.3SG **Nikolay-POSS.3SG.ACC**
gitta.
 with
 ‘Yes, Vitya is living there together with Nikolay.’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.186)

4.3.2 Possessive Suffixes Inflected for Case

When a case suffix is added to a possessive suffix, both may change their shape significantly. In combination with case suffixes, the possessive suffixes have the underspecified forms displayed in Chart 40.

Also, the case suffixes may have a different shape when added to a possessive suffix (see Chart 36 above as well). The endings of the ablative, instrumental and comparative cases remain the same when combined with a possessive suffix. The possessive genitive and accusative are homonymous in all persons, the form being “possessive suffix + *-n*”. Since these similar forms res-

CHART 40 Possessive suffixes in combination with case suffixes

	1SG	2SG	3SG	1PL	2PL	3PL
Nominative	-(I)m	-(I)ŋ	-(t)A	-BIt	-GIIt	-LARa
Oblique	-BA ~ -BI	-GA ~ -GI	-(t)I	-BIIt	-GIIt	-LARl

CHART 41 Genitive/accusative forms of ‘stone’

	Dolgan	Turkish		Tatar	
	GEN ~ ACC	GEN	ACC	GEN	ACC
1SG	<i>ta:s-pin</i>	<i>taş-ım-ın</i>	<i>taş-ım-ı</i>	<i>taş-ım-niŋ</i>	<i>taş-ım-ni</i>
3SG	<i>ta:h-in</i>	<i>taş-ı-nın</i>	<i>taş-ın-ı</i>	<i>taş-ı-niŋ</i>	<i>taş-ın</i>
3PL	<i>ta:s-tarin</i>	<i>taş-ları-nın</i>	<i>taş-ların-ı</i>	<i>taş-ları-niŋ</i>	<i>taş-ların</i>

ult from merger and analogy, further explanations are necessary to keep synchrony and diachrony apart. Chart 41 shows that the Dolgan third-person genitive forms -(t)In and -LARIn correspond to the Turkish forms -(s)I-nIn and -LARl-nIn as well as to the Tatar forms -(s)I-nIŋ and -LARl-nIŋ. In contrast, the homonymous accusative forms correspond to the Turkish forms -(s)In-I and -LARIn-I, and to the similar Tatar forms -(s)In and -LARIn. This comparison shows that -*n* itself does not trace back to a case suffix. In turn, it is a residue of the so-called “pronominal *n*”, which is present in oblique third-person possessive forms in many Turkic languages (Johanson 2021: 459, 464, 801–802).

In non-third-person forms, the pronominal *n* is diachronically absent. In Dolgan, however, non-third-person genitive/accusative forms exhibit precisely the same pattern as third-person forms, i.e. “POSS-*n*”. Whether the final *n* in the accusative forms is a shortened variant of the accusative case suffix -(n)I or an analogic takeover from the third-person forms is hard to answer and goes beyond the scope of a descriptive grammar. As for the genitive case, the forms are obligatory in third-person contexts (245) but rare in non-third-person contexts ((246) vs (247)). Again, this supports the explanation for the origin of the forms since there is no dedicated genitive case suffix in Dolgan, and the pronominal *n* is diachronically absent in non-third-person forms. Therefore, examples like (247) show genitive forms in non-third-person contexts that have arisen through analogy.

- (245) *Bil-e-bin min, ogonn'or-um*
 know-PRS-1SG 1SG.PRO old.man-POSS.1SG
uba:j-in d'aktar-a.
 elder.brother-POSS.3SG.GEN woman-POSS.3SG
 'I know [her], the wife of my husband's elder brother.'
 (KiPP_2009_Story_nar.KiPP.054)
- (246) *Burduk-ka:n, ma:ma-m ed'i:j-e, Kilabija,*
 like.this-INTS mum-POSS.1SG elder.sister-POSS.3SG Claudia
kepse:-čči e-t-e.
 tell-PTCP.HAB AUX-PST1-3SG
 'Like this, my mum's elder sister, Claudia, always told it.'
 (NaLE_2002_StonyBone_flk.004)
- (247) [...] *d'ogus-tuk ka:jas atak-pin bilčij-i*
 easy-ADVZ left leg-POSS.1SG.GEN muscle-ACC
gojobu:n-nap-pit-im.
 wound-VBZ.CAUS-PST2-1SG
 '[Serving as a commander of an entity in this battle at the promontory
 of Kursk], I got a muscle of my left leg slightly wounded.'
 (MiXS_1967_SoldierInSecondWorldWar_nar.037)

To pull the strings together, this shows that the genitive case is functionally an established part of the Dolgan grammar system, but that *-n* is formally no genitive marker as such. Given the diachronic and the synchronic patterns explained above, I conceive the Dolgan possessive genitive/accusative forms as complex units, which is also revealed in glossing, e.g. *taba-bin* 'reindeer-POSS.1SG.GEN' ~ 'reindeer-POSS.1SG.ACC' and *taba-tin* 'reindeer-POSS.3SG.GEN' ~ 'reindeer-POSS.3SG.ACC'.

The partitive case suffix is *-nA* in the possessive declension, which shows that it diachronically contains the "pronominal *n*" as well (see Johanson (2021: 475) for details). Finally, the dative-locative case has the endings *-r* (first and second person singular) and *-gAr* (first and second person plural, third person) when added to possessive suffixes.

Chart 42 to Chart 47 show the underspecified morphemes and all possible allomorphs when case and possessive suffixes are combined. In Chart 48 to Chart 50, the possessive paradigms of *taba* 'reindeer', *it* 'dog', and *kün* 'sun; day' are presented.

CHART 42 POSS.1SG with case suffixes

	Morpheme	Allomorphs
Nominative	-(I)m	<i>-m</i> <i>-im, -in, -um, -üm</i>
(Genitive) / Accusative	-BIn	<i>-bin, -bin, -bun, -bün</i> <i>-pin, -pin, -pun, -pün</i> <i>-min, -min, -mun, -mün</i>
Partitive	-BI-nA	<i>-bi-na, -bi-ne, -bu-na, -bü-ne</i> <i>-pi-na, -pi-ne, -pu-na, -pü-ne</i> <i>-mi-na, -mi-ne, -mu-na, -mü-ne</i>
Dative-locative	-BA-r	<i>-ba-r, -be-r, -bo-r, -bö-r</i> <i>-pa-r, -pe-r, -po-r, -pö-r</i> <i>-ma-r, -me-r, -mo-r, -mö-r</i>
Ablative	-BI-ttAn	<i>-bi-ttan, -bi-tten, -bu-ttan, -bü-tten</i> <i>-pi-ttan, -pi-tten, -pu-ttan, -pü-tten</i> <i>-mi-ttan, -mi-tten, -mu-ttan, -mü-tten</i>
Instrumental	-BI-nAn	<i>-bi-nan, -bi-nen, -bu-nan, -bü-nen</i> <i>-pi-nan, -pi-nen, -pu-nan, -pü-nen</i> <i>-mi-nan, -mi-nen, -mu-nan, -mü-nen</i>
Comparative	-BI-nA:gAr	<i>-bi-na:gar, -bi-ne:ger, -bu-na:gar, -bü-ne:ger</i> <i>-pi-na:gar, -pi-ne:ger, -pu-na:gar, -pü-ne:ger</i> <i>-mi-na:gar, -mi-ne:ger, -mu-na:gar, -mü-ne:ger</i>

CHART 43 POSS.2SG with case suffixes

	Morpheme	Allomorphs
Nominative	-(I)ŋ	<i>-ŋ</i> <i>-iŋ, -iŋ, -uŋ, -üŋ</i>
(Genitive) / Accusative	-GIn	<i>-gin, -gin, -gun, -gün</i> <i>-kin, -kin, -kun, -kün</i> <i>-ŋin, -ŋin, -ŋun, -ŋün</i>
Partitive	-GI-nA	<i>-gi-na, -gi-ne, -gu-na, -gü-ne</i> <i>-ki-na, -ki-ne, -ku-na, -kü-ne</i> <i>-ŋi-na, -ŋi-ne, -ŋu-na, -ŋü-ne</i>

CHART 43 POSS.2SG with case suffixes (*cont.*)

	Morpheme	Allomorphs
Dative-locative	-GA-r	<i>-ga-r, -ge-r, -go-r, -gö-r</i> <i>-ka-r, -ke-r, -ko-r, -kö-r</i> <i>-ŋa-r, -ŋe-r, -ŋo-r, -ŋö-r</i>
Ablative	-GI-ttAn	<i>-gi-ttan, -gi-tten, -gu-ttan, -gü-tten</i> <i>-ki-ttan, -ki-tten, -ku-ttan, -kü-tten</i> <i>-ŋi-ttan, -ŋi-tten, -ŋu-ttan, -ŋü-tten</i>
Instrumental	-GI-nAn	<i>-gi-nan, -gi-nen, -gu-nan, -gü-nen</i> <i>-ki-nan, -ki-nen, -ku-nan, -kü-nen</i> <i>-ŋi-nan, -ŋi-nen, -ŋu-nan, -ŋü-nen</i>
Comparative	-GI-nA:gAr	<i>-gi-na:gar, -gi-ne:ger, -gu-na:gar, -gü-ne:ger</i> <i>-ki-na:gar, -ki-ne:ger, -ku-na:gar, -kü-ne:ger</i> <i>-ŋi-na:gar, -ŋi-ne:ger, -ŋu-na:gar, -ŋü-ne:ger</i>

CHART 44 POSS.3SG with case suffixes

	Morpheme	Allomorphs
Nominative	-(t)A	<i>-ta, -te, -to, -tö</i> (after vowels) <i>-a, -e, -o, -ö</i> (after consonants)
Genitive /	-(t)In	<i>-tin, -tın, -tun, -tün</i> (after vowels)
Accusative		<i>-in, -in, -un, -ün</i> (after consonants)
Partitive	-(t)I-nA	<i>-ti-na, -ti-ne, -tu-na, -tü-ne</i> (after vowels) <i>-i-na, -i-ne, -u-na, -ü-ne</i> (after consonants)
Dative-locative	-(t)I-gAr	<i>-ti-gar, -ti-ger, -tu-gar, -tü-ger</i> (after vowels) <i>-i-gar, -i-ger, -u-gar, -ü-ger</i> (after consonants)
Ablative	-(t)I-ttAn	<i>-ti-ttan, -ti-tten, -tu-ttan, -tü-tten</i> (after vowels) <i>-i-ttan, -i-tten, -u-ttan, -ü-tten</i> (after consonants)
Instrumental	-(t)I-nAn	<i>-ti-nan, -ti-nen, -tu-nan, -tü-nen</i> (after vowels) <i>-i-nan, -i-nen, -u-nan, -ü-nen</i> (after consonants)
Comparative	-(t)I-nA:gAr	<i>-ti-na:gar, -ti-ne:ger, -tu-na:gar, -tü-ne:ger</i> (after vowels) <i>-i-na:gar, -i-ne:ger, -u-na:gar, -ü-ne:ger</i> (after consonants)

CHART 45 POSS.1PL with case suffixes

	Morpheme	Allomorphs
Nominative	-BI _t	<i>-bit, -bit, -but, -büt</i> <i>-pīt, -pit, -put, -püt</i> <i>-mit, -mit, -mut, -müt</i>
(Genitive) / Accusative	-BI _t In	<i>-bitin, -bitin, -butun, -bütün</i> <i>-pītin, -pitin, -putun, -pütün</i> <i>-mitin, -mitin, -mutun, -mütün</i>
Partitive	-BI _t I-nA	<i>-biti-na, -biti-ne, -butu-na, -bütü-ne</i> <i>-piti-na, -piti-ne, -putu-na, -pütü-ne</i> <i>-miti-na, -miti-ne, -mutu-na, -mütü-ne</i>
Dative- locative	-BI _t I-gAr	<i>-biti-gar, -biti-ger, -butu-gar, -bütü-ger</i> <i>-piti-gar, -piti-ger, -putu-gar, -pütü-ger</i> <i>-miti-gar, -miti-ger, -mutu-gar, -mütü-ger</i>
Ablative	-BI _t I-ttAn	<i>-biti-ttan, -biti-tten, -butu-ttan, -bütü-tten</i> <i>-piti-ttan, -piti-tten, -putu-ttan, -pütü-tten</i> <i>-miti-ttan, -miti-tten, -mutu-ttan, -mütü-tten</i>
Instrumental	-BI _t I-nAn	<i>-biti-nan, -biti-nen, -butu-nan, -bütü-nen</i> <i>-piti-nan, -piti-nen, -putu-nan, -pütü-nen</i> <i>-miti-nan, -miti-nen, -mutu-nan, -mütü-nen</i>
Comparative	-BI _t I-nA:gAr	<i>-biti-na:gar, -biti-ne:ger, -butu-na:gar, -bütü-ne:ger</i> <i>-piti-na:gar, -piti-ne:ger, -putu-na:gar, -pütü-ne:ger</i> <i>-miti-na:gar, -miti-ne:ger, -mutu-na:gar, -mütü-ne:ger</i>

CHART 46 POSS.2PL with case suffixes

	Morpheme	Allomorphs
Nominative	-GI _t	<i>-git, -git, -gut, -güt</i> <i>-kit, -kit, -kut, -küt</i> <i>-ɣit, -ɣit, -ɣut, -ɣüt</i>
(Genitive) / Accusative	-GI _t In	<i>-gitin, -gitin, -gutun, -gütün</i> <i>-kitin, -kitin, -kutun, -kütün</i> <i>-ɣitin, -ɣitin, -ɣutun, -ɣütün</i>
Partitive	-GI _t I-nA	<i>-giti-na, -giti-ne, -gutu-na, -gütü-ne</i> <i>-kiti-na, -kiti-ne, -kutu-na, -kütü-ne</i> <i>-ɣiti-na, -ɣiti-ne, -ɣutu-na, -ɣütü-ne</i>

CHART 46 POSS.2PL with case suffixes (*cont.*)

	Morpheme	Allomorphs
Dative-locative	-GIɬI-gAr	<i>-giti-gar, -giti-ger, -gutu-gar, -gütü-ger</i> <i>-kiti-gar, -kiti-ger, -kutu-gar, -kütü-ger</i> <i>-ɲiti-gar, -ɲiti-ger, -ɲutu-gar, -ɲütü-ger</i>
Ablative	-GIɬI-ttAn	<i>-giti-ttan, -giti-tten, -gutu-ttan, -gütü-tten</i> <i>-kiti-ttan, -kiti-tten, -kutu-ttan, -kütü-tten</i> <i>-ɲiti-ttan, -ɲiti-tten, -ɲutu-ttan, -ɲütü-tten</i>
Instrumental	-GIɬI-nAn	<i>-giti-nan, -giti-nen, -gutu-nan, -gütü-nen</i> <i>-kiti-nan, -kiti-nen, -kutu-nan, -kütü-nen</i> <i>-ɲiti-nan, -ɲiti-nen, -ɲutu-nan, -ɲütü-nen</i>
Comparative	-GIɬI-nA:gAr	<i>-giti-na:gar, -giti-ne:ger, -gutu-na:gar, -gütü-ne:ger</i> <i>-kiti-na:gar, -kiti-ne:ger, -kutu-na:gar, -kütü-ne:ger</i> <i>-ɲiti-na:gar, -ɲiti-ne:ger, -ɲutu-na:gar, -ɲütü-ne:ger</i>

CHART 47 POSS.3PL with case suffixes

	Morpheme	Allomorphs
Nominative	-LArA	<i>-lara, -lere, -loro, -lörö</i> <i>-tara, -tere, -toro, -törö</i> <i>-dara, -dere, -doro, -dörö</i> <i>-nara, -nere, -noro, -nörö</i>
Genitive / Accusative	-LArIn	<i>-larin, -lerin, -lorun, -lörün</i> <i>-tarin, -terin, -torun, -törün</i> <i>-darin, -derin, -doru, -dörün</i> <i>-narin, -nerin, -norun, -nörün</i>
Partitive	-LArI-nA	<i>-lari-na, -leri-ne, -loru-na, -lörü-ne</i> <i>-tari-na, -teri-ne, -toru-na, -törü-ne</i> <i>-dari-na, -deri-ne, -doru-na, -dörü-ne</i> <i>-nari-na, -neri-ne, -noru-na, -nörü-ne</i>
Dative-locative	-LArI-gAr	<i>-lari-gar, -leri-ger, -loru-gar, -lörü-ger</i> <i>-tari-gar, -teri-ger, -toru-gar, -törü-ger</i> <i>-dari-gar, -deri-ger, -doru-gar, -dörü-ger</i> <i>-nari-gar, -neri-ger, -noru-gar, -nörü-ger</i>

CHART 47 POSS.3PL with case suffixes (cont.)

	Morpheme	Allomorphs
Ablative	-LArI-ttAn	<i>-lari-ttan, -leri-tten, -loru-ttan, -lörü-tten</i> <i>-tari-ttan, -teri-tten, -toru-ttan, -törü-tten</i> <i>-dari-ttan, -deri-tten, -doru-ttan, -dörü-tten</i> <i>-nari-ttan, -neri-tten, -noru-ttan, -nörü-tten</i>
Instrumental	-LArI-nAn	<i>-lari-nan, -leri-nen, -loru-nan, -lörü-nen</i> <i>-tari-nan, -teri-nen, -toru-nan, -törü-nen</i> <i>-dari-nan, -deri-nen, -doru-nan, -dörü-nen</i> <i>-nari-nan, -neri-nen, -noru-nan, -nörü-nen</i>
Comparative	-LArI-nA:gAr	<i>-lari-na:gar, -leri-ne:ger, -loru-na:gar, -lörü-ne:ger</i> <i>-tari-na:gar, -teri-ne:ger, -toru-na:gar, -törü-ne:ger</i> <i>-dari-na:gar, -deri-ne:ger, -doru-na:gar, -dörü-ne:ger</i> <i>-nari-na:gar, -neri-ne:ger, -noru-na:gar, -nörü-ne:ger</i>

CHART 48 Possessive paradigm of *taba* ‘reindeer’

	First person	Second person	Third person
Singular possessor			
Nominative	<i>tabam</i>	<i>tabaŋ</i>	<i>tabata</i>
Genitive/Accusative	<i>tababın</i>	<i>tabağın</i>	<i>tabatın</i>
Partitive	<i>tababına</i>	<i>tabağına</i>	<i>tabatına</i>
Dative-locative	<i>tababar</i>	<i>tabagar</i>	<i>tabatıgar</i>
Ablative	<i>tababıttan</i>	<i>tabağıttan</i>	<i>tabatıttan</i>
Instrumental	<i>tababınan</i>	<i>tabağınan</i>	<i>tabatınan</i>
Comparative	<i>tababına:gar</i>	<i>tabağına:gar</i>	<i>tabatına:gar</i>
Plural possessor			
Nominative	<i>tababıt</i>	<i>tabağıt</i>	<i>tabalara</i>
Genitive/Accusative	<i>tababıtın</i>	<i>tabağıtın</i>	<i>tabaların</i>
Partitive	<i>tababıtına</i>	<i>tabağıtına</i>	<i>tabalarına</i>
Dative-locative	<i>tababıtıgar</i>	<i>tabağıtıgar</i>	<i>tabalarıgar</i>
Ablative	<i>tababıtıttan</i>	<i>tabağıtıttan</i>	<i>tabalarıttan</i>
Instrumental	<i>tababıtınan</i>	<i>tabağıtınan</i>	<i>tabalarınan</i>
Comparative	<i>tababıtına:gar</i>	<i>tabağıtına:gar</i>	<i>tabalarına:gar</i>

CHART 49 Possessive paradigm of *it* 'dog'

	First person	Second person	Third person
Singular possessor			
Nominative	<i>itim</i>	<i>itij</i>	<i>ita</i>
Genitive/Accusative	<i>ippin</i>	<i>ikkın</i>	<i>itın</i>
Partitive	<i>ippına</i>	<i>ikkına</i>	<i>itına</i>
Dative-locative	<i>ippar</i>	<i>ikkar</i>	<i>itigar</i>
Ablative	<i>ippittan</i>	<i>ikkittan</i>	<i>itittan</i>
Instrumental	<i>ippinan</i>	<i>ikkinan</i>	<i>itinan</i>
Comparative	<i>ippına:gar</i>	<i>ikkına:gar</i>	<i>itına:gar</i>
Plural possessor			
Nominative	<i>ippit</i>	<i>ikkıt</i>	<i>ittara</i>
Genitive/Accusative	<i>ippitin</i>	<i>ikkitin</i>	<i>ittarin</i>
Partitive	<i>ippitına</i>	<i>ikkitına</i>	<i>ittarına</i>
Dative-locative	<i>ippitigar</i>	<i>ikkitigar</i>	<i>ittarigar</i>
Ablative	<i>ippitittan</i>	<i>ikkitittan</i>	<i>ittarittan</i>
Instrumental	<i>ippitinan</i>	<i>ikkitinan</i>	<i>ittarınan</i>
Comparative	<i>ippitına:gar</i>	<i>ikkitına:gar</i>	<i>ittarına:gar</i>

CHART 50 Possessive paradigm of *kün* 'sun; day'

	First person	Second person	Third person
Singular possessor			
Nominative	<i>künüm</i>	<i>künüy</i>	<i>küne</i>
Genitive/Accusative	<i>kümmün</i>	<i>küñjün</i>	<i>künün</i>
Partitive	<i>kümmüne</i>	<i>küñjüne</i>	<i>kününe</i>
Dative-locative	<i>kümmer</i>	<i>küñjer</i>	<i>künüger</i>
Ablative	<i>kümmütten</i>	<i>küñjütten</i>	<i>künütten</i>
Instrumental	<i>kümmünen</i>	<i>küñjünen</i>	<i>kününen</i>
Comparative	<i>kümmüne:ger</i>	<i>küñjüne:ger</i>	<i>kününe:ger</i>
Plural possessor			
Nominative	<i>kümmüt</i>	<i>küñjüt</i>	<i>künnere</i>
Genitive/Accusative	<i>kümmütün</i>	<i>küñjütün</i>	<i>künnerein</i>
Partitive	<i>kümmütüne</i>	<i>küñjütüne</i>	<i>künnerrine</i>

CHART 50 Possessive paradigm of *kün* ‘sun; day’ (cont.)

	First person	Second person	Third person
Dative-locative	<i>kümmütüger</i>	<i>künñütüger</i>	<i>künneriger</i>
Ablative	<i>kümmütütten</i>	<i>künñütütten</i>	<i>künneritten</i>
Instrumental	<i>kümmütüinen</i>	<i>künñütüinen</i>	<i>künnerinen</i>
Comparative	<i>kümmütüne:ger</i>	<i>künñütüne:ger</i>	<i>künnerine:ger</i>

4.4 Predicate Forms of Nominals

As typical for languages of Siberia, nominals can be inflected verbally in Dolgan. Verbally inflected nominals occur in different types of non-verbal predication (predicate nominals, predicate adjectives, locative and existential clauses, possessive clauses). The various functional domains are described in Section 8.2; here, the formal aspects of nominal predication are in focus. Example (248) shows a simple instance of nominal predication in Dolgan.

- (248) *Ułakan ki:h ogo-bun ulakam-mın e:t.*
big girl child-1SG big-1SG EVID
‘I am the big daughter; I am big, apparently.’
(BeAM_199X_LegendSpiritOfTrees_nar.009)

The paradigm of personal endings is the same as the predicative endings (set 1) of verbs (see Section 6.2), displayed in Chart 51.

As was stated already, both nouns and adjectives can be inflected verbally. Moreover, in certain syntactic environments, even degree adverbs (249) and postpositions (250) can get nominal predicative endings.

- (249) [...] *ile čıstej bagaji-lar ile.*
indeed clean very-3PL indeed
‘[Really very beautiful, they live very cleanly, it is said], they are indeed very clean.’
(BeAM_199X_HumanInLandOfDeath_flk.194)

- (250) *Ikki pas’olok kördük-ter, e:?*
two settlement like-3PL AFF
‘They are like two settlements, right?’
(ZhNA_KuNS_20XX_LifeAndMusic_conv.KuNS.019)

CHART 51 Predicate forms of nominals

	Morpheme	Allomorphs
1SG	-BIn	- <i>bin</i> , - <i>bin</i> , - <i>bun</i> , - <i>bün</i> - <i>pín</i> , - <i>pín</i> , - <i>pun</i> , - <i>pün</i> - <i>min</i> , - <i>min</i> , - <i>mun</i> , - <i>mün</i>
2SG	-GIn	- <i>gín</i> , - <i>gín</i> , - <i>gun</i> , - <i>gün</i> - <i>kín</i> , - <i>kín</i> , - <i>kun</i> , - <i>kün</i> - <i>ɣín</i> , - <i>ɣín</i> , - <i>ɣun</i> , - <i>ɣün</i>
3SG	-Ø	—
1PL	-BIt	- <i>bit</i> , - <i>bit</i> , - <i>but</i> , - <i>büt</i> - <i>pít</i> , - <i>pít</i> , - <i>put</i> , - <i>püt</i> - <i>mit</i> , - <i>mit</i> , - <i>mut</i> , - <i>müt</i>
2PL	-GIt	- <i>git</i> , - <i>git</i> , - <i>gut</i> , - <i>güt</i> - <i>kit</i> , - <i>kit</i> , - <i>kut</i> , - <i>küt</i> - <i>ɣit</i> , - <i>ɣit</i> , - <i>ɣut</i> , - <i>ɣüt</i>
3PL	-LAr	- <i>lar</i> , - <i>ler</i> , - <i>lor</i> , - <i>lör</i> - <i>tar</i> , - <i>ter</i> , - <i>tor</i> , - <i>tör</i> - <i>dar</i> , - <i>der</i> , - <i>dor</i> , - <i>dör</i> - <i>nar</i> , - <i>ner</i> , - <i>nor</i> , - <i>nör</i>

Nominal predication suffixes can even be attached to case inflected forms like in example (251). This is, however, not obligatory, which can be shown by example (252), where the predicate suffix is attached to the existential noun *ba:r* and not to the adverbial *d'ie ihiger* ‘in the house’.

- (251)

Kannik

č'a:s-taŋ-ɣín=ij?

what.kind.of

part-ABL-2SG=Q

‘From which unit are you?’

(ChVD_AkEE_198204_SoldierInWar_nar.ChVD.075)
- (252)

“D'ie ih-i-ger

ba:r-bin”, die-bit

Li:bira.

house inside-POSS.3SG-DAT/LOC

EX-1SG

say-PST2.3SG

Lyybyra

“I am in the house”, Lyybyra said.’

(PoS_PrG_1964_Lyybyra_flk.086)

If the predication is negated, the predicative suffixes cannot be attached to the nominal itself, but to the negative existential noun *huòk*, like in (253), or a copula must be used.

- (253) *O-lor buô irîâ-ta huôk-tar ol oloyko-lor.*
 that-PL EMPH song-POSS **NEG-3PL** that tale-PL
 'They are without songs, those tales.'
 (ElBK_KuNS_2004_Storytellers_conv.ElBK.007)

In Section 8.2, non-verbal predication is dealt with in detail from a more functional point of view.

Pronominal Inflectional Morphology

As pronouns differ from nouns and adjectives concerning their inflectional morphology, this chapter deals with them separately. In Dolgan, both personal pronouns (5.1) and other pro-forms (5.2) exhibit inflectional morphology, which is described in the following sections, the structure of the chapter being analogous to Section 3.3.

5.1 Personal Pronouns

Personal pronouns are inflected for case, however, with some constraints. There are no genitive forms of personal pronouns—instead, possessive forms of personal pronouns (see Section 3.3.1) or the respective nominative form is used. Nor are there partitive forms of personal pronouns, which may be explained by the functional domain(s) of the partitive case in Dolgan (see Section 4.2.2.4). Neither indefiniteness nor part-whole-relations nor the non-existence of the referent at the time of speech can be connected with the prototypical characteristics of entities referred to with personal pronouns.

Within the paradigm of personal pronouns, much variation can be observed. The first- and second-person singular forms have the oblique stem *minigi-* ~ *min'igi-* ~ *mijigi-* ~ *mī:gi-* and *enigi-* ~ *en'igi-* ~ *ejigi-*, respectively. The first two variants are most frequent and occur in all dialects, whereas *mijigi-* ~ *mī:gi-* and *ejigi-* are typical for Upper Dolgan. In the dative-locative case, the stem is *minî-* ~ *min'î-* and *enî-* ~ *en'î-*, respectively. Again, Upper Dolgan shows further variants, namely *mijî-* ~ *mî-* and *ejî-*, respectively. As for the case suffixes attached, the accusative case suffix is *-n*, like in the possessive declension of nominals (see Section 4.3.2).

The first- and second-person plural forms are more regular, except for the dative-locative case stems *bihî-* and *ehî-*, respectively. However, Lower Dolgan has the stem variants *bihigiti-* and *ehigiti-*, respectively, in the accusative case. As for the case suffixes attached, the accusative case suffix is *-(n)I*, when connected to the regular stem, but *-n*, when connected to *bihigiti-* and *ehigiti-*.

The third-person singular forms are regular, except for the dative-locative case stem *giniî-*. The third-person plural forms can exhibit allegro forms of the stem (*ginner-*, and more seldom *giller-*) but are otherwise entirely regular. Chart 52 shows the inflected forms of the personal pronouns, not paying

CHART 52 Inflection of personal pronouns

	1SG	2SG	3SG
Nominative	<i>min</i>	<i>en</i>	<i>gini</i>
Accusative	<i>minigin</i>	<i>enigin</i>	<i>ginini</i>
Dative-locative	<i>minîeke</i>	<i>enîeke</i>	<i>ginîeke</i>
Ablative	<i>minigitten</i>	<i>enigitten</i>	<i>ginitten</i>
Instrumental	<i>miniginen</i>	<i>eniginen</i>	<i>gininen</i>
Comparative	<i>miniginne:ger</i>	<i>eniginne:ger</i>	<i>gininne:ger</i>

	1PL	2PL	3PL
Nominative	<i>bihigi</i>	<i>ehigi</i>	<i>giniler</i>
Accusative	<i>bihigini</i>	<i>ehigini</i>	<i>ginileri</i>
Dative-locative	<i>bihîeke</i>	<i>ehîeke</i>	<i>ginilerge</i>
Ablative	<i>bihigitten</i>	<i>ehigitten</i>	<i>ginilerten</i>
Instrumental	<i>bihiginen</i>	<i>ehiginen</i>	<i>ginilerinen</i>
Comparative	<i>bihiginne:ger</i>	<i>ehiginne:ger</i>	<i>ginilerde:ger</i>

attention to the above-described variation. For the sake of compactness, only the most frequent forms are indicated.

Although personal pronouns are not systematically inflected for possession, it is worth mentioning that possessive suffixes can be attached to the third-person personal pronouns. In this case, however, the possessive suffixes hardly express possession but are used for establishing anaphoric reference (see Section 10.3), as can be seen in examples (254) and (255).

- (254) *Onton buôllagina e: gini-ŋ huruj-ar aradavoj*
then however eh 3SG.PRO-POSS.2SG write-PRS.3SG tribal
stroj tuh-u-nan.
order side-POSS.3SG-INS
‘Then, however, he writes about the tribal order.’
(ErTS_AkPG_1994_AAPopov_nar.ErTS.015)

- (255) *Giniler-ij* *ol* *ista:-bit* *bîâr-gin*
 3PL.PRO-POSS.2SG that chew-PTCP.PST liver-POSS.2SG.ACC
il-a *il-al-lar*, [...].
 take-CVB.SIM take.AUX-PRS-3PL
 ‘They take the chewed liver, [and after that they take the scraped skin, they smear it].’
 (BeES_2010_HidePreparation_nar.044)

The possessive pronouns (see Section 3.3.1) are not regularly inflected for case since they primarily occur in the non-agreeing modifier position. However, if the head of the given noun phrase is empty, they may take over nominal morphology, as shown in example (256). Since the suffix *-îene* forming possessive pronouns contains the third-person singular possessive suffix *-e*, the inflected forms are third-person singular as well.

- (256) *Bihîet-ter-i-ger* *dîeri-ler* *kart’ina bari-ta*, *bihigi*
 our-PL-POSS.3SG-DAT/LOC like-3PL picture all-POSS.3SG 1PL.PRO
omuk-tar-biti-gar *dîeri*.
 people-PL-POSS.1PL-DAT/LOC like
 ‘All pictures are like our [people], like at our people’s [places].’
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.164)

5.2 Other Pro-Forms

5.2.1 Reflexive/Emphatic Pronoun

As was mentioned in Section 3.3.2.1, the reflexive/emphatic pronoun *beje-* can be inflected for person-number and case. Person-number inflection is expressed with possessive suffixes, whereby it is essential to note that the possessive suffixes do not convey any possessive meaning. Since person-number inflection is obligatory, the paradigm of *beje-* only exhibits “possessive” forms; simple case forms like **beje-ni* ‘self-ACC’ do not occur. *Beje-* can be inflected for all cases except for the partitive case, which is probably due to the functional domain of the partitive case (indefiniteness, non-existence of referent, see Section 4.2.2.4). Chart 53 shows the inflectional paradigm of *beje-*.

5.2.2 Reciprocal Pronoun

The reciprocal pronoun *beje beje-* is principally inflected similarly to the reflexive/emphatic pronoun *beje-*. However, its first component always remains in the base form, and the second component inflects for person-number (pos-

CHART 53 Inflection of the reflexive/emphatic pronoun *beje-*

	1SG	2SG	3SG
Nominative	<i>bejem</i>	<i>bejerj</i>	<i>bejete</i>
Genitive/Accusative	<i>bejebin</i>	<i>bejegin</i>	<i>bejetin</i>
Dative-locative	<i>bejeber</i>	<i>bejeger</i>	<i>bejetiger</i>
Ablative	<i>bejebitten</i>	<i>bejegitten</i>	<i>bejetitten</i>
Instrumental	<i>bejebinen</i>	<i>bejeginen</i>	<i>bejetinen</i>
Comparative	<i>bejebine:ger</i>	<i>bejegine:ger</i>	<i>bejetine:ger</i>

	1PL	2PL	3PL
Nominative	<i>bejebit</i>	<i>bejegit</i>	<i>bejelere</i>
Genitive/Accusative	<i>bejebitin</i>	<i>bejegitin</i>	<i>bejelerin</i>
Dative-locative	<i>bejebitiger</i>	<i>bejegitiger</i>	<i>bejeleriger</i>
Ablative	<i>bejebititten</i>	<i>bejegititten</i>	<i>bejeleritten</i>
Instrumental	<i>bejebitinen</i>	<i>bejegitinen</i>	<i>bejelerinen</i>
Comparative	<i>bejebitine:ger</i>	<i>bejegitine:ger</i>	<i>bejelerine:ger</i>

CHART 54 Inflection of the reciprocal pronoun *beje beje-*

	1PL	2PL	3PL
Nominative	<i>beje bejebit</i>	<i>beje bejegit</i>	<i>beje bejelere</i>
Genitive / Accusative	<i>beje bejebitin</i>	<i>beje bejegitin</i>	<i>beje bejelerin</i>
Dative-Locative	<i>beje bejebitiger</i>	<i>beje bejegitiger</i>	<i>beje bejeleriger</i>
Ablative	<i>beje bejebititten</i>	<i>beje bejegititten</i>	<i>beje bejeleritten</i>
Instrumental	<i>beje bejebitinen</i>	<i>beje bejegitinen</i>	<i>beje bejelerinen</i>
Comparative	<i>beje bejebitine:ger</i>	<i>beje bejegitine:ger</i>	<i>beje bejelerine:ger</i>

sessive suffixes) and case. Since reciprocal constructions always include at minimum two referents, singular forms do not occur. Chart 54 shows the inflected forms of *beje beje-*.

Finally, though often present, the case inflection of *beje beje-* is apparently not obligatory. In example (257), the reciprocal suffix *-(I)s* at the verb and the occurrence of the reciprocal pronoun itself seem to be sufficient for marking the relevant syntactic function, namely an indirect object.

- (257) [...], *hin* *beje-beje biêr-is-e-git?*
 however self-self give-RECP-PRS-2PL
 ‘[There were few books and textbooks at that time], however, you give
 [them] to each other?’
 (BeEI_KuNS_1998_Teacher_conv.KuNS.012)

5.2.3 *Demonstratives*

In general, it can be said that demonstratives are regularly inflected for case and number. Attaching possessive suffixes is also possible, but shows some formal and functional peculiarities, whence it will be dealt with later. Expectedly, demonstrative adverbs like *manna* ‘here; hither’ or *oččogo* ‘then; at that time’ show no further inflection. At first, the demonstrative pronouns *bu*, *iti* and *ol* are discussed before coming to the demonstrative adjectives and quantifiers.

The item *bu* ‘this’ has the variants *bu*, *ba*, *ba:*, *bo*, *ma*, *ma:* and *mo*, whereby only *bu*, *ba* and *ma:* occur frequently. When inflected for case, the word-initial *b* is nasalized because of the “pronominal *n*” in the following syllable, yielding stem variants like *man-* or *mun-*. Historically, *bu* with word-initial plosive is restricted to the nominative case. The latter forms with word-initial nasal are limited to oblique cases (Menges 1995: 121–122). However, this system is more flexible in Dolgan. Thus, both variants can occur in all cases. Chart 55 shows the most frequent inflected forms of *bu*.

CHART 55 Inflection of *bu* ‘this (here)’

	Singular	Plural
Nominative	<i>bu</i> ~ <i>ba</i> <i>ma:</i>	<i>bular</i> ~ <i>balar</i>
Accusative	<i>bunu</i> <i>mani</i> ~ <i>munu</i>	<i>bulari</i> ~ <i>balari</i>
Dative-locative	<i>bunuga</i> <i>maniga</i> ~ <i>maniāga</i> ~ <i>munuga</i>	<i>bularga</i> ~ <i>balarga</i>
Ablative	<i>buntan</i> <i>mantan</i> ~ <i>muntan</i>	<i>bulartan</i> ~ <i>balartan</i>
Instrumental	<i>bunan</i> <i>manan</i> ~ <i>munan</i>	<i>bularinan</i> ~ <i>balarinan</i>
Comparative	<i>bunna:gar</i> <i>manna:gar</i> ~ <i>munna:gar</i>	<i>bularda:gar</i> ~ <i>balarda:gar</i>

The demonstrative pronoun *iti* ‘this/that (there)’ shows far less variation than *bu*. Its oblique stem, however, also shows the “pronominal *n*”. Chart 56 shows the inflected forms of *iti*.

CHART 56 Inflection of *iti* ‘this/that (there)’

	Singular	Plural
Nominative	<i>iti</i>	<i>itiler</i>
Accusative	<i>itini</i>	<i>itileri</i>
Dative-locative	<i>itinige</i>	<i>itilerge</i>
Ablative	<i>itinten</i>	<i>itilerten</i>
Instrumental	<i>itinen</i>	<i>itilerinen</i>
Comparative	<i>itinne:ger</i>	<i>itilerde:ger</i>

The demonstrative pronoun *ol* ‘that’ behaves similarly to *iti*, showing only few variation and exhibiting the “pronominal *n*” in oblique cases. In the case of *ol*, the word-final *l* and the “pronominal *n*” coalesce, yielding the oblique stem *on-*. In the ablative case, the stem-final consonant can rarely be further assimilated to *t*, yielding the form *otton*. Chart 57 shows the inflected forms of *ol*.

CHART 57 Inflection of *ol* ‘that’

	Singular	Plural
Nominative	<i>ol</i>	<i>olor</i>
Accusative	<i>onu</i>	<i>oloru</i>
Dative-locative	<i>onuga</i>	<i>olorgo</i>
Ablative	<i>onton</i> ~ (<i>otton</i>)	<i>olorton</i>
Instrumental	<i>onon</i>	<i>olorunan</i>
Comparative	<i>onno:gor</i>	<i>olordo:gor</i>

The demonstrative pronouns can be further inflected with possessive suffixes. This pattern is most frequently observed in the case of *ol*, whereas *bu* and *iti* seldom show it. The inflection of demonstrative pronouns with possessive suffixes differs from the expected pattern. Forms like **on-um* ‘that-POSS.1SG’ or **on-uy* ‘that-POSS.2SG’ do not occur. Instead, the stem of the demonstrative pronoun is extended with the element -tI, after which the respective possessive

suffix is added. The suffix -tI seems to be homonymous with the oblique form of the third-person singular possessive suffix (see Section 4.3.1) at first glance. However, concerning morphonology, it shows differences: With stems ending in -n, it would be expected to show the form -I, cf. *d'on-u-gar* 'people-POSS.3SG-DAT/LOC' < *d'on* + -(t)I + -gAr. In the case of the demonstrative pronouns, in turn, -tI forms the stems *manti-*, *itinti-* and *ontu-*. Hence, it may well be that -tI historically traces back to the third-person singular possessive suffix, but synchronically it behaves to some extent differently. In interlinear glossing, the analysis of the item as the possessive suffix of the third person singular is kept in this grammar. The emerging forms are also regularly inflected for case and number. The order of suffixes in these forms is as follows:

stem — -tI — number — possession — case

Adding -tI to the three demonstrative pronouns leads to the following stems: *manti-* (variants: *buntu-* and *muntu-*), *itinti-* and *ontu-*. As possessive suffixes are mostly attached to the demonstrative pronoun *ol*, and as the respective forms of *bu* and *iti* can be derived analogically, only the forms of *ol* are presented here. Chart 58 shows the inflection of *ol* with possessive suffixes, referring to a singular possessee. In the case of a plural possessee, the plural marker -LAr is inserted between -tI and the possessive suffix, e.g. *on-tu-lar-im* 'that-POSS.3SG-PL-POSS.1SG', *on-tu-lar-bin* 'that-POSS.3SG-PL-POSS.1SG.ACC' et cetera. Chart 59 shows the possessive forms of *ol* 'that' with a plural possessee.

CHART 58 Possessive suffixes with *ol* 'that', singular possessee

	First person	Second person	Third person
Singular possessor			
Nominative	<i>ontum</i>	<i>ontuj</i>	<i>ontuta</i>
Genitive/Accusative	<i>ontubun</i>	<i>ontugun</i>	<i>ontutun</i>
Dative-locative	<i>ontubar</i>	<i>ontugar</i>	<i>ontutugar</i>
Ablative	<i>ontubuttan</i>	<i>ontuguttan</i>	<i>ontututtan</i>
Instrumental	<i>ontubunan</i>	<i>ontugunan</i>	<i>ontutunan</i>
Comparative	<i>ontubuna:gar</i>	<i>ontuguna:gar</i>	<i>ontutuna:gar</i>
Plural possessor			
Nominative	<i>ontubut</i>	<i>ontugut</i>	<i>ontulara</i>
Genitive/Accusative	<i>ontubutun</i>	<i>ontugutun</i>	<i>ontularin</i>
Dative-locative	<i>ontubutugar</i>	<i>ontugutugar</i>	<i>ontularigar</i>

CHART 58 Possessive suffixes with *ol* ‘that’, singular possessee (*cont.*)

	First person	Second person	Third person
Ablative	<i>ontubututtan</i>	<i>ontugututtan</i>	<i>ontularittan</i>
Instrumental	<i>ontubutunan</i>	<i>ontugutunan</i>	<i>ontularinan</i>
Comparative	<i>ontubutuna:gar</i>	<i>ontugutuna:gar</i>	<i>ontularina:gar</i>

CHART 59 Possessive suffixes with *ol* ‘that’, plural possessee

	First person	Second person	Third person
Singular possessor			
Nominative	<i>ontularim</i>	<i>ontulariŋ</i>	<i>ontulara</i>
Genitive/Accusative	<i>ontularbin</i>	<i>ontulargin</i>	<i>ontularin</i>
Dative-locative	<i>ontularbar</i>	<i>ontulargar</i>	<i>ontularigar</i>
Ablative	<i>ontularbittan</i>	<i>ontulargittan</i>	<i>ontularittan</i>
Instrumental	<i>ontularbinan</i>	<i>ontularginan</i>	<i>ontularinan</i>
Comparative	<i>ontularbina:gar</i>	<i>ontulargina:gar</i>	<i>ontularina:gar</i>
Plural possessor			
Nominative	<i>ontularbit</i>	<i>ontulargit</i>	<i>ontulara</i>
Genitive/Accusative	<i>ontularbitin</i>	<i>ontulargitin</i>	<i>ontularin</i>
Dative-Locative	<i>ontularbitigar</i>	<i>ontulargitigar</i>	<i>ontularigar</i>
Ablative	<i>ontularbitittan</i>	<i>ontulargitittan</i>	<i>ontularittan</i>
Instrumental	<i>ontularbitinan</i>	<i>ontulargitinan</i>	<i>ontularinan</i>
Comparative	<i>ontularbitina:gar</i>	<i>ontulargitina:gar</i>	<i>ontularina:gar</i>

The demonstrative adjectives *mannik* (~ *munnu*k ~ *bunnu*k) ‘such (like this)’, *itinnik* ‘such (like this/that there)’ and *onnuk* ‘such (like that)’ are inflected very regularly. Chart 60 shows their inflection.

CHART 60 Inflection of demonstrative adjectives

	Proximal	Medial	Distal
Singular			
Nominative	<i>mannik</i>	<i>itinnik</i>	<i>onnuk</i>
Accusative	<i>mannigi</i>	<i>itinnigi</i>	<i>onnugu</i>

CHART 60 Inflection of demonstrative adjectives (*cont.*)

	Proximal	Medial	Distal
Partitive	<i>mannikta</i>	<i>itinnikte</i>	<i>onnukta</i>
Dative-locative	<i>mannikka</i>	<i>itinnikke</i>	<i>onnukka</i>
Ablative	<i>manniktan</i>	<i>itinnikten</i>	<i>onnuktan</i>
Instrumental	<i>manniginan</i>	<i>itinniginen</i>	<i>onnugunan</i>
Comparative	<i>mannikta:gar</i>	<i>itinnikte:ger</i>	<i>onnukta:gar</i>
Plural			
Nominative	<i>manniktar</i>	<i>itinnikter</i>	<i>onnuktar</i>
Accusative	<i>manniktari</i>	<i>itinnikteri</i>	<i>onnuktari</i>
Partitive	<i>manniktarda</i>	<i>itinnikterde</i>	<i>onnuktarda</i>
Dative-locative	<i>manniktarga</i>	<i>itinnikterge</i>	<i>onnuktarga</i>
Ablative	<i>manniktartan</i>	<i>itinnikterten</i>	<i>onnuktartan</i>
Instrumental	<i>manniktarinan</i>	<i>itinnikterinen</i>	<i>onnuktarinan</i>
Comparative	<i>manniktarda:gar</i>	<i>itinnikterde:ger</i>	<i>onnuktarda:gar</i>

Finally, there are the demonstrative quantifiers *bačča* ‘so much (like this)’, *itičče* ‘so much (like this there)’ and *oččo* ‘so much (like that)’. They are rarely inflected and only exhibit singular forms since they already have inherent quantificational semantics. Chart 61 shows their inflection. Note that the dative-locative *oččogo* is lexicalized, meaning ‘then’ (see Section 3.6.3).

CHART 61 Inflection of demonstrative quantifiers

	Proximal	Medial	Distal
Nominative	<i>bačča</i>	<i>itičče</i>	<i>oččo</i>
Accusative	<i>baččani</i>	<i>itiččeni</i>	<i>oččonu</i>
Partitive	<i>baččata</i>	<i>itiččete</i>	<i>oččoto</i>
Dative-locative	<i>baččaga</i>	<i>itiččege</i>	<i>oččogo</i>
Ablative	<i>baččattan</i>	<i>itiččetten</i>	<i>oččotton</i>
Instrumental	<i>baččanan</i>	<i>itiččenen</i>	<i>oččonon</i>
Comparative	<i>baččata:gar</i>	<i>itiččete:ger</i>	<i>oččoto:gor</i>

5.2.4 Interrogative Pronouns

As described in Section 3.3.2.4, Dolgan exhibits five interrogative pronouns that are inflected for case and number: *tūōk* ‘what’, *kim* ‘who’, *kannik* ‘what kind of’, *kas* ‘how much’ and *tōhō* ‘how much; how many’. Other interrogative pronouns like *kanna* ‘where; whither’ or *kajdak* ‘how’ do not exhibit inflection and are therefore excluded here.

All five named interrogatives are inflected more or less regularly but exhibit some exceptional and peculiar features. The interrogative *tūōk* ‘what’ shows parallel forms of the accusative (*tugu ~ tu:gu ~ tūōgu*) and instrumental (*tugunan ~ tu:gunan ~ tūōgunan*) cases, which are synchronically instances of free variation not being determined phonetically or morphosyntactically (see also Stachowski 1990 for the same phenomenon in Sakha). The variation relates to the facultative monophthongization of diphthongs described in Section 2.1. The interrogative *kim* ‘who’ shows two parallel forms in the dative-locative case (*kimŋe* and *kimīēke*), whereby the former variant is paradigmatically expected, and the latter variant appears to be formed analogically to personal pronouns, cf. *miniēke* ‘1SG.PRO.DAT/LOC’ and *eniēke* ‘2SG.PRO.DAT/LOC’. Moreover, besides the expected plural form *kim-ner* ‘who-PL’, also *kim-ne:k* ‘who-PROPR’, formed with the propriative suffix -LA:K, does occur. Chart 62 shows the inflection of *tūōk* ‘what’ and *kim* ‘who’.

CHART 62 Inflection of interrogative pronouns I

	<i>tūok</i> ‘what’	<i>kim</i> ‘who’	
		Singular	
Nominative	<i>tūok</i>	<i>kim</i>	
Accusative	<i>tugu ~ tu:gu ~ tūogu</i>	<i>kimi</i>	
Partitive	<i>tūokta</i>	<i>kimne</i>	
Dative-locative	<i>tūokka</i>	<i>kimŋe ~ kimīēke</i>	
Ablative	<i>tūoktan</i>	<i>kimten</i>	
Instrumental	<i>tugunan ~ tu:gunan ~ tūogunan</i>	<i>kiminen</i>	
Comparative	<i>tūokta:gar</i>	<i>kimne:ger</i>	
		Plural	
Nominative	<i>tūoktar</i>	<i>kimner</i>	<i>kimne:k</i>
Accusative	<i>tūoktari</i>	<i>kimneri</i>	<i>kimne:gi</i>
Partitive	<i>tūoktarda</i>	<i>kimnerde</i>	<i>kimne:kte</i>
Dative-locative	<i>tūoktarga</i>	<i>kimnerge</i>	<i>kimne:kke</i>
Ablative	<i>tūoktartan</i>	<i>kimnerten</i>	<i>kimne:kten</i>

CHART 62 Inflection of interrogative pronouns I (*cont.*)

	<i>tuōk</i> 'what'	<i>kim</i> 'who'	
Instrumental	<i>tuōktarinan</i>	<i>kimnerinen</i>	<i>kimne:ginen</i>
Comparative	<i>tuōktarda:gar</i>	<i>kimnerde:ger</i>	<i>kimne:kte:ger</i>

The interrogative *kannik* 'what kind of' mostly shows nominative and accusative forms, *kas* 'how much' and *töhö* 'how much' show exclusively nominative and accusative forms. Moreover, the latter lack a plural paradigm due to their inherent quantificational semantics. Chart 63 displays the inflection of these three interrogatives, including the constructed oblique forms of *kas* 'how much' and *töhö* 'how much', although they occur very seldom.

Interrogative pronouns do not exhibit genitive forms but, in contrast to other pronouns, do exhibit partitive forms. The lack of genitive forms can be explained because the genitive only occurs in double possessive constructions (see Section 4.2.2.3), where interrogative pronouns cannot occur. On the contrary, the partitive case is not constrained by interrogativity, as it often expresses uncertainty or even the non-existence of the object referred to (see Section 4.2.2.4).

CHART 63 Inflection of interrogative pronouns II

	<i>kannik</i> 'what kind of'	<i>kas</i> 'how much'	<i>töhö</i> 'how much'
Singular			
Nominative	<i>kannik</i>	<i>kas</i>	<i>töhö</i>
Accusative	<i>kannigi</i>	<i>kahi</i>	<i>töhönü</i>
Partitive	<i>kannikta</i>	<i>kasta</i>	<i>töhötö</i>
Dative-locative	<i>kannikka</i>	<i>kaska</i>	<i>töhögö</i>
Ablative	<i>kanniktan</i>	<i>kastan</i>	<i>töhöttön</i>
Instrumental	<i>kanniginan</i>	<i>kahinan</i>	<i>töhönnön</i>
Comparative	<i>kannikta:gar</i>	<i>kasta:gar</i>	<i>töhödö:gör</i>
Plural			
Nominative	<i>kanniktar</i>	—	—
Accusative	<i>kanniktari</i>	—	—
Partitive	<i>kanniktarda</i>	—	—

CHART 63 Inflection of interrogative pronouns II (*cont.*)

	<i>kannik</i> ‘what kind of’	<i>kas</i> ‘how much’	<i>töhö</i> ‘how much’
Dative-locative	<i>kanniktarga</i>	–	–
Ablative	<i>kanniktartan</i>	–	–
Instrumental	<i>kanniktarinan</i>	–	–
Comparative	<i>kanniktarda:gar</i>	–	–

5.2.5 Indefinite Pronouns and Negative Polarity Items

Indefinite pronouns and negative polarity items exhibit the same morphological features as the correlating interrogative pronoun. Only the interrogative pronoun is inflected, the particles *ere* ~ *ire*, *eme* ~ *emete* and *da:* ~ *da*, which form the indefinite pronoun and negative polarity item, respectively (see Sections 3.3.2.5 and 3.3.2.6), remain unchanged. Therefore, no paradigms are shown here; see Section 5.2.4 for the inflection of interrogative pronouns. Example (258) shows an inflected form of the indefinite pronoun *tûok ere* ‘something’, and example (259) shows an inflected form of a negative polarity item *kim da* ‘nobody [lit. anybody]’.

- (258) *Dogot-tor-u-gar* *tug-u* *ere* *iti*
 friend-PL-POSS.3SG-DAT/LOC what-ACC INDF this
tuh-u-nan *kepse:ri* *gim-mit.*
 side-POSS.3SG-INS tell-CVB.PURP want-PST2.3SG
 ‘He wanted to tell his friends something about this.’
 (PoNA_19900810_Tojo0InVoloChanka_nar.024)

- (259) [...], *kimîe-ke* *da* *köll'ür-üme.*
 who-DAT/LOC INDF show-NEG.IMP.2SG
 ‘[Well, this silk kerchief, put it into your pocket], do not show it to anybody.’
 (ErSV_1964_WarBirdsAnimals_flk.523)

Verbal Inflectional Morphology

6.1 Verbal Stems

Since there are different verbal stems in Dolgan, which are essential for paradigm building, they shall be discussed here briefly. According to the form of their stems, verbs can be divided into four groups:

- verbs with a stem ending with a long low vowel (e.g. *aha:-* ‘eat’, *kördö:-* ‘search’)
- verbs with a stem ending with a diphthong (*dîe-* ‘say’, *hiê-* ‘eat’)
- verbs with a stem ending with the consonants *p, t, k, m, n, ŋ, s, r, l* (e.g. *kap-* ‘catch’, *hit-* ‘lie (down)’, *tik-* ‘sew’, *ka:m-* ‘walk’, *gin-* ‘make’, *toŋ-* ‘freeze’, *is-* ‘1. drink; 2. go’, *bar-* ‘go’, *il-* ‘take’)
- verbs with a stem ending with *j* (e.g. *utuj-* ‘sleep’, *huruj-* ‘write’)

It is immediately striking that no verbal stems end with short vowels or long high vowels. Both can be explained diachronically: Short vowel stems were, as a rule, extended with the formant **-j*, e.g. *utuj-* ‘sleep’ < **utV-* (see Károly 2009 for the similar development in Sakha). The long low vowel stems trace back to the combination of an older stem with the verbalizer *-A:*, e.g. *aha:-* ‘eat’ < *as* ‘food’. Since the suffix *-A:* has only low-vocalic allomorphs, all verb stems formed with it end with a long low vowel.

The combination of verbal stems and inflectional suffixes can lead to stem alternations, consonant assimilations, lenition, vowel syncope and metathesis (see Section 2.5 for morphonology). The stem remains unaltered when consonant-initial suffixes are attached to verbal stems ending with a long low vowel or a diphthong. When, however, vowel-initial suffixes are attached to these stems, this causes various alternations:

- In the case of a long low vowel (e.g. the habitual participle *-A:ččI*; see Section 6.3.1.6), the vowel of the suffix is deleted: *aha:-* ‘eat’ + *-A:ččI* → *aha:-čči*; *dîe-* ‘say’ + *-A:ččI* → *dîe-čči*
- In the case of a diphthong (e.g. the future participle *-IAK*; see Section 6.3.1.5), the stem-final vowel is deleted: *aha:-* ‘eat’ + *-IAK* → *ah-îak*; *dîe-* ‘say’ + *-IAK* → *d-îek*
- In the case of a long high vowel (e.g. the present participle *-I:r*; see Section 6.3.1.1), the stem-final vowel is also deleted: *aha:-* ‘eat’ + *-I:r* → *ah-î:r*; *dîe-* ‘say’ + *-I:r* → *d-î:r*

When consonant-initial suffixes are attached to a consonant stem, the following alternations may occur:

- The stem remains unaltered (stems ending with *-p*, *-k*, *-m*, *-ŋ*, *-s*, *-r* and *-l*): *bar-* ‘go’ + *-BIT* (postterminal past participle; see Section 6.3.1.3) → *bar-bit*
- The stem assimilates to the initial consonant of the suffix (stems ending with the coronals *-t* and *-n*): *hit-* ‘lie (down)’ + *-BIT* → *hip-pit*; *gin-* ‘make’ + *-BIT* → *gim-mit*

When vowel-initial suffixes (e.g. the present participle *-Ar*; see Section 6.3.1.1) are added to consonant stems, stem-final *p* and *k* are voiced, and *s* turns into *h*.

kap- ‘catch’ + *-Ar* → *kab-ar*
tik- ‘sew’ + *-Ar* → *tig-er*
is- ‘1. drink; 2. go’ + *-Ar* → *ih-er*.

Moreover, polysyllabic consonant stems can exhibit vowel syncope in this environment (see Section 2.5.4), which often entails several consonant assimilations since a syllable boundary is established between two consonants. These processes may change the shape of a verbal stem significantly.

ogus- ‘beat’ + *-Ar* → *oks-or*
agin- ‘long for; remember’ + *-Ar* → *akt-ar*
hirit- ‘go; walk’ + *-Ar* → *hild’-ar*

When consonant-initial suffixes (e.g. the postterminal past participle *-BIT*; see Section 6.3.1.3) are added to these stems, the stem may exhibit metathesis. This is, however, only partly predictable and subject to much variation. Therefore, relevant contexts are highlighted in the upcoming sections.

ogus- ‘beat’ + *-BIT* → *oksu-but*
agin- ‘long for; remember’ + *-BIT* → *akti-bit*
hirit- ‘go; walk’ + *-BIT* → *hild’i-bit*

Stems ending with *-j* mostly behave like consonant stems ending with *-r* or *-l*, except some derivational processes, in which the suffix **j* is deleted. A case in point for the latter is the verbal distributive suffix *-TALA:*, pointing to multiple subjects/objects.

huruj- ‘write’ + *-BIT* ‘PTCP.PST’ → *huruj-but*
huruj- ‘write’ + *-TALA:* ‘MULT’ → *huru-tala:-*

In the sections on verbal morphology, there will always be forms of some of the following listed verbs.

- *bar-* ‘go’ (consonant stem without assimilation),
- *kap-* ‘catch’ (consonant stem with assimilation),
- *ogus-* ‘beat’ (consonant stem with syncope or metathesis),
- *utuj-* ‘sleep’ (consonant stem with -j),
- *aha:-* ‘eat’ (vowel stem with long vowel),
- *diē-* ‘say’ (vowel stem with diphthong).

However, not in each section, paradigms of each verb are given, but the most expressive ones are chosen in the given context. Moreover, hints to possibly occurring morphonological processes and corresponding forms are provided where necessary.

6.2 Sets of Personal Endings

Person-number reference at verbs is established via personal endings. In Dolgan, there are three different sets of personal endings. As typical for Turkic languages, the first set are the so-called *predicative endings*, used in both verbal and non-verbal predication (see Section 4.4). The second set of endings are the so-called *possessive endings*, which are homonymous with the possessive suffixes (see Section 4.3.1). Finally, in Dolgan, there is a third set of personal endings. These endings are exclusively used in the conditional-temporal moods (see Sections 6.5.2 and 6.5.3). Historically, the third set of endings, here called *conditional endings*, can be traced back to the combination of the respective possessive suffix and the possessive locative case suffix *-nA. The latter contains a trace of the “pronominal *n*” and has been re-interpreted as the possessive partitive case suffix in Dolgan (see Section 4.3.2). As a variant, the instrumental case suffix -nAn can also occur in the third set of personal endings.

The personal endings from different sets appear in different tense-aspect and mood forms. In some cases, only the choice of the set of personal endings distinguishes such forms, e.g. in combination with the postterminal past tense suffix -BIT (see Section 6.4.2). The functionally different forms *bar-bip-pin* ‘go-PST2-1SG’ and *bar-bit-im* ‘go-PST2-1SG’ solely differ in the shape of the personal endings. The former has the personal ending from set 1 (predicative endings), the latter has the personal ending from set 2 (possessive endings). When discussing tense-aspect and mood forms (Sections 6.4 and 6.5), it is always stated which personal endings are attached to the relevant form. Chart 64 shows the three sets of personal endings in Dolgan.

As can be expected from the representation in Chart 64, most endings are subject to morphonological processes yielding a bunch of allomorphs each. Generally, the suffix vowel is subject to vowel harmony (see Section 2.5.1). As

CHART 64 Sets of personal endings

	Predicative endings (set 1)	Possessive endings (set 2)	Conditional endings (set 3)
1SG	-BI _n	-(I)m	-pInA ~ -pInAn
2SG	-GI _n	-(I)ŋ	-kInA ~ -kInAn
3SG	-Ø	-(t)A	-InA ~ -InAn
1PL	-BI _t	-BI _t	-pItInA ~ -pItInAn
2PL	-GI _t	-GI _t	-kItInA ~ -kItInAn
3PL	-LAr	-LArA	-tArInA ~ -tArInAn

for consonant assimilations, the story is more complex, whence it is discussed in more detail here and summarized in Chart 65.

First-person endings start as a rule with a labial consonant, which is *b* (after vowels and voiced non-nasal consonants), *p* (after voiceless consonants) or *m* (after nasal consonants). The first-person singular form of the possessive ending set behaves slightly differently: To consonant stems, -Im is attached, and to vowel stems, -*m* is attached. In the conditional ending set, only allomorphs with initial *p* occur since the conditional endings are only connected to the conditional-temporal mood marker -TAK and the abessive particle *ilik* ‘not yet’.

Second-person endings start as a rule with a velar consonant, which is *g* (after vowels and voiced non-nasal consonants), *k* (after voiceless consonants) or *ŋ* (after nasal consonants). The second-person singular form of the possessive ending set behaves slightly differently: To consonants stems, -Iŋ is attached, and to vowel stems, -*ŋ* is attached. In the conditional ending set, only allomorphs with initial *k* occur since the conditional endings are only connected to the conditional-temporal mood marker -TAK and the abessive particle *ilik* ‘not yet’.

The third-person singular forms—if not zero—exhibit *t* in the suffix onset, which is elided after consonants. Since the conditional endings are solely attached to the conditional-temporal mood marker -TAK and the abessive particle *ilik* ‘not yet’, only vowel-initial allomorphs occur in the third person singular.

The third-person plural forms start with a coronal consonant, which is *l* (after vowels and *l*), *t* (after voiceless consonants), *d* (after voiced non-nasal consonants [not *l*]) and *n* (after nasal consonants). Note that the third-person plural suffix in verbal morphology differs from the plural suffix in nominal morphology: *köt-öl-lör* ‘fly-PRS-3PL’ vs *kötör-dör* ‘bird-PL’. In the conditional end-

CHART 65 Allomorphs of personal endings

	Predicative endings (set 1)	Possessive endings (set 2)
1SG	<i>-bin, -bin, -bun, -bün</i> <i>-pın, -pın, -pun, -pün</i> <i>-mın, -mın, -mun, -mün</i>	<i>-m</i> <i>-ım, -ım, -um, -üm</i>
2SG	<i>-gın, -gın, -gun, -gün</i> <i>-kın, -kın, -kun, -kün</i> <i>-hın, -hın, -hun, -hün</i>	<i>-η</i> <i>-ih, -ih, -uη, -üh</i>
3SG	<i>-Ø</i>	<i>-ta, -te, -to, -tö</i> <i>-a, -e, -o, -ö</i>
1PL	<i>-bit, -bit, -but, -büt</i> <i>-pıt, -pıt, -put, -püt</i> <i>-mıt, -mıt, -mut, -müt</i>	<i>-bit, -bit, -but, -büt</i> <i>-pıt, -pıt, -put, -püt</i> <i>-mıt, -mıt, -mut, -müt</i>
2PL	<i>-gıt, -gıt, -gut, -güt</i> <i>-kıt, -kıt, -kut, -küt</i> <i>-hıt, -hıt, -hut, -hüt</i>	<i>-gıt, -gıt, -gut, -güt</i> <i>-kıt, -kıt, -kut, -küt</i> <i>-hıt, -hıt, -hut, -hüt</i>
3PL	<i>-lar, -ler, -lor, -lör</i> <i>-tar, -ter, -tor, -tör</i> <i>-dar, -der, -dor, -dör</i> <i>-nar, -ner, -nor, -nör</i>	<i>-lara, -lere, -loro, -lörö</i> <i>-tara, -tere, -toro, -törö</i> <i>-dara, -dere, -doro, -dörö</i> <i>-nara, -nere, -noro, -nörö</i>
Conditional endings (set 3)		
1SG	<i>-pına(n), -pine(n), -puna(n), -püne(n)</i>	
2SG	<i>-kına(n), -kine(n), -kuna(n), -küne(n)</i>	
3SG	<i>-ına(n), -ine(n), -una(n), -üne(n)</i>	
1PL	<i>-pıtına(n), -pitine(n), -putuna(n), -pütüne(n)</i>	
2PL	<i>-kıtına(n), -kitine(n), -kutuna(n), -kütüne(n)</i>	
3PL	<i>-tarına(n), -terine(n), -toruna(n), -törüne(n)</i>	

ing set, only allomorphs with initial *t* occur since the conditional endings are only attached to the conditional-temporal mood marker -TAK and the abessive particle *ılık* 'not yet'.

6.3 Non-finite Verb Forms

From a purely morphological perspective, the borderline between finite and non-finite forms in Dolgan is often fuzzy. Many forms can have both interpretations, e.g. the present participle -Ar ~ -I:r, the postterminal past participle -BIT and the negative present participle -BAT.

<i>tig-er</i>	<i>d'aktar</i>	vs	<i>d'aktar</i>	<i>tig-er</i>
sew-PTCP.PRS	woman		woman	sew-PRS.3SG
'sewing woman'			'the woman is sewing'	

<i>tik-pit</i>	<i>d'aktar</i>	vs	<i>d'aktar</i>	<i>tik-pit</i>
sew-PTCP.PST	woman		woman	sew-PST2.3SG
'woman who has sewn'			'the woman sewed'	

<i>tik-pet</i>	<i>d'aktar</i>	vs	<i>d'aktar</i>	<i>tik-pet</i>
sew-NEG.PTCP.PRS	woman		woman	sew-NEG.PRS.3SG
'woman who does not sew'			'the woman does not sew'	

As can be seen, only syntax—here: word order—can disambiguate the given verb forms. Moreover, many finite paradigms are formed based on non-finite verb forms. Since non-finite forms play such a significant role in paradigm building in Dolgan, they will be discussed first in what follows, although this diverges to some extent from the usual structure of descriptive grammars.

6.3.1 Participles

Participles are non-finite forms fulfilling the syntactic functions of adjectives; thus, they may modify nominals. Seven verbal forms in Dolgan unambiguously qualify for participles, as shown in Chart 66. Additionally, the abessive participle -A *ilik* ~ -I: *ilik* ~ -Alik ~ -I:lik expresses events that have not taken place yet (a.k.a. *cunctative participle* or *participium nondum facti*). This item formally differs from the participles mentioned before, but functionally it behaves like a participle, which is why it is treated here as such.

The following sections describe both formal and functional aspects of the named forms. Generally, participles can be inflected for number, case and possession, just like other nominals (see Chapter 4). Moreover, participles form several types of subordinate clauses (see Section 9.3).

CHART 66 Participle inventory

Participle	Morpheme
Present participle	-Ar ~ -I:r
Negative present participle	-BAT
Postterminal past participle	-BIT
Negative postterminal past participle	-BAAtAK
Future participle	-IAK
Habitual participle	-A:ččI
Conditional participle	-TAK
Abessive participle	-A <i>ilik</i> ~ -I: <i>ilik</i> ~ -Alik ~ -I:lik

6.3.1.1 Present Participle

The present participle has two morphemes, which are complementarily distributed. The morpheme -Ar attaches to consonant stems, whereas the form -I:r attaches to vowel and diphthong stems. This distribution can be explained diachronically since the long vowel in the latter form traces back to the amalgamation of the suffix vowel with an epenthetic **j* (Károly 2009: 348; Johanson 2021: 629–631). As expected, vowel harmony applies, which leads to the allomorphs displayed in Chart 67.

CHART 67 Allomorphs of the
 present participle

Morpheme	Allomorphs
-Ar	-ar, -er, -or, -ör
-I:r	-i:r, -i:~r, -u:r, -ü:~r

Additionally, the verbal stem may exhibit alternations when the present participle is attached: Vowel stems lose their final long vowel or diphthong, respectively. Consonant stems ending with *p* and *k* show intervocalic voicing, and consonant stems ending with *s* alternate with *h*. Polysyllabic consonant stems may exhibit vowel syncope. Chart 68 shows the non-inflected forms of the present participle.

CHART 68 Non-inflected forms of the
 present participle

Verbal stem	Present participle
<i>bar-</i> ‘go’	<i>barar</i>
<i>kap-</i> ‘catch’	<i>kabar</i>
<i>ogus-</i> ‘beat’	<i>oksor</i>
<i>utuj-</i> ‘sleep’	<i>utujar</i>
<i>aha-</i> ‘eat’	<i>ahî:r</i>
<i>diê-</i> ‘say’	<i>dî:r</i>

The present participle can be inflected for number, case and possession, whereby partitive forms do not occur. When the plural marker -LAr is attached to the participle suffix -Ar ~ -I:r, not the expected forms *-ArdAr and *-I:rdAr, respectively (cf. the noun *kötör-dör* ‘bird-PL’) emerge, but the further assimilated forms -AllAr and -I:llAr. Chart 69 and Chart 70 show the inflection of the present participle form *barar* (from *bar-* ‘go’) for case, number and possession.

CHART 69 Inflection of the present participle I (case & number)

	Case	Case & number
Nominative	<i>barar</i>	<i>barallar</i>
Accusative	<i>barari</i>	<i>barallari</i>
Dative-locative	<i>bararga</i>	<i>barallarga</i>
Ablative	<i>barartan</i>	<i>barallartan</i>
Instrumental	<i>bararînan</i>	<i>barallarînan</i>
Comparative	<i>bararda:gar</i>	<i>barallarda:gar</i>

CHART 70 Inflection of the present participle II (case & possession)

	1SG	2SG	3SG
Nominative	<i>bararîm</i>	<i>bararîj</i>	<i>barara</i>
Accusative	<i>bararbin</i>	<i>barargîn</i>	<i>bararin</i>
Dative-locative	<i>bararbar</i>	<i>barargar</i>	<i>bararigar</i>

CHART 70 Inflection of the present participle II (case & possession) (*cont.*)

	1SG	2SG	3SG
Ablative	<i>bararbittan</i>	<i>barargittan</i>	<i>bararittan</i>
Instrumental	<i>bararbinan</i>	<i>bararginan</i>	<i>bararinan</i>
Comparative	<i>bararbina:gar</i>	<i>barargina:gar</i>	<i>bararina:gar</i>
	1PL	2PL	3PL
Nominative	<i>bararbit</i>	<i>barargit</i>	<i>barallara</i>
Accusative	<i>bararbitin</i>	<i>barargitin</i>	<i>barallarin</i>
Dative-locative	<i>bararbitigar</i>	<i>barargitigar</i>	<i>barallarigar</i>
Ablative	<i>bararbitittan</i>	<i>barargitittan</i>	<i>barallarittan</i>
Instrumental	<i>bararbitinan</i>	<i>barargitinan</i>	<i>barallarinan</i>
Comparative	<i>bararbitina:gar</i>	<i>barargitina:gar</i>	<i>barallarina:gar</i>

The present participle can modify a nominal as an adjective does. Thereby, the interpretation can be both active and passive, i.e. the modified nominal can play either an agent or a patient semantic role. However, the former pattern, displayed in example (260), is more frequent.

- (260) [...] *üçüğe-j-dik ülel-i:r kihi-ler?*
 good-ADVZ work-PTCP.PRS human-PL
 ‘[At that time, the people had good reindeer], the people who were working well?’
 (SuON_KuNS_19990303_HardLife_conv.KuNS.022)

- (261) *Gini ah-i:r as-tar-a: ka:s-tar, kus-tar,*
 3SG.PRO eat-PTCP.PRS food-PL-POSS.3SG goose-PL duck-PL
kabîeka:t-tar.
 partridge-PL
 ‘The food, which it [the snow owl] eats, [is] geese, ducks and partridges.’
 (PoNA_2004_SnowOwl_flk.006)

The dative-locative form of the present participle can sometimes be used like an infinitive form (262). Moreover, this form is governed by the postposition *tali* ‘similar to’, yielding simulative clauses, which often express unreal events serving as the object of comparison for the given event (263).

- (262) *Oččogo, ibij, e-t-e iarakan-a*
 then oh.dear be-PST1-3SG difficult-POSS.3SG
ũoret-er-ge.
teach-PTCP.PRS-DAT/LOC
 'At that time, oh dear, it was difficult to teach.'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.065)
- (263) *Togo ire gini onnu-ga atin kihi*
 why INDF 3SG.PRO place-DAT/LOC different human
hit-ar-ga tali.
lie-PTCP.PRS-DAT/LOC similar
 'For some reason, there seems to lie another person instead of him.'
 (AsKS_19XX_Amulet_nar.171)

Finally, one analytic tense-aspect form (past progressive; see Section 6.4.2.5) and one mood form (necessitative 1; see Section 6.5.7.1) are based on the present participle. Besides that, the present participle forms subordinate clauses, especially relative and complement clauses (see Section 9.3).

6.3.1.2 Negative Present Participle

The negative present participle has the morpheme -BAT, exhibiting the 36 allomorphs displayed in Chart 71. Since the suffix vowel is low, its allophones are *a*, *e*, *o* and *ö* depending on vowel harmony. The suffix-initial consonant is subject to consonant assimilations and can be *b* (when attached to vowel stems and consonant stems with a voiced non-nasal stem-final consonant), *p* (when attached to consonant stems with a voiceless stem-final consonant) and *m* (when attached to consonant stems with a stem-final nasal consonant). Additionally, polysyllabic stems may exhibit metathesis, and the suffix-initial consonant is *b*. The suffix-final consonant *t* can change to *p* (when a suffix beginning with a labial consonant is added; mostly first-person suffixes) and *k* (when a suffix beginning with a velar consonant is added; mostly second-person suffixes), respectively. Finally, stem-final coronals assimilate to the suffix-initial consonant turning into *p*, e.g. *eppet* < *et*- 'speak, say'. Chart 72 shows the forms of the negative present participle.

Like the affirmative present participle (see Section 6.3.1.1), the negative present participle is regularly inflected for case, number and possession. Chart 73 and Chart 74 show the inflected forms of the negative present participle.

The negative present participle can modify a nominal, forming potentially relative clauses. Thereby, the relativized noun can play both agent and patient

CHART 71 Allomorphs of the negative present participle

Preceding environment	Allomorphs	Following environment
V, C _{+voice} , -nas	<i>-bat, -bet, -bot, -böt</i>	#, V, C _{-lab} , -vel
V, C _{+voice} , -nas	<i>-bap, -bep, -bop, -böp</i>	C _{+lab}
V, C _{+voice} , -nas	<i>-bak, -bek, -bok, -böc</i>	C _{+vel}
C _{-voice}	<i>-pat, -pet, -pot, -pöt</i>	#, V, C _{-lab} , -vel
C _{-voice}	<i>-pap, -pep, -pop, -pöp</i>	C _{+lab}
C _{-voice}	<i>-pak, -pek, -pok, -pök</i>	C _{+vel}
C _{+voice} , +nas	<i>-mat, -met, -mot, -möt</i>	#, V, C _{-lab} , -vel
C _{+voice} , +nas	<i>-map, -mep, -mop, -möp</i>	C _{+lab}
C _{+voice} , +nas	<i>-mak, -mek, -mok, -mök</i>	C _{+vel}

CHART 72 Non-inflected forms of the negative present participle

Verbal stem	Negative present participle
<i>bar-</i> ‘go’	<i>barbat</i>
<i>kap-</i> ‘catch’	<i>kappat</i>
<i>ogus-</i> ‘beat’	<i>oksubat</i>
<i>utuj-</i> ‘sleep’	<i>utujbat</i>
<i>aha-</i> ‘eat’	<i>aha:bat</i>
<i>diê-</i> ‘say’	<i>diêbet</i>

CHART 73 Inflection of negative present participle I (case & number)

	Case	Case & number
Nominative	<i>barbat</i>	<i>barbattar</i>
Accusative	<i>barbatî</i>	<i>barbattari</i>
Dative-locative	<i>barbakka</i>	<i>barbattarga</i>
Ablative	<i>barbattan</i>	<i>barbattartan</i>

CHART 73 Inflection of negative present participle I (*cont.*)

	Case	Case & number
Instrumental	<i>barbatinan</i>	<i>barbattarinan</i>
Comparative	<i>barbatta:gar</i>	<i>barbattarda:gar</i>

CHART 74 Inflection of negative present participle II (case & possession)

	1SG	2SG	3SG
Nominative	<i>barbatim</i>	<i>barbatiŋ</i>	<i>barbata</i>
Accusative	<i>barbappin</i>	<i>barbakkin</i>	<i>barbatin</i>
Dative-locative	<i>barbappar</i>	<i>barbakkar</i>	<i>barbatigar</i>
Ablative	<i>barbappittan</i>	<i>barbakkittan</i>	<i>barbatittan</i>
Instrumental	<i>barbappinan</i>	<i>barbakkinan</i>	<i>barbatinan</i>
Comparative	<i>barbappina:gar</i>	<i>barbakkina:gar</i>	<i>barbatina:gar</i>

	1PL	2PL	3PL
Nominative	<i>barbappit</i>	<i>barbakkit</i>	<i>barbattara</i>
Accusative	<i>barbappitin</i>	<i>barbakkitin</i>	<i>barbattarin</i>
Dative-locative	<i>barbappitigar</i>	<i>barbakkitigar</i>	<i>barbattarigar</i>
Ablative	<i>barbappitittan</i>	<i>barbakkitittan</i>	<i>barbattarittan</i>
Instrumental	<i>barbappitinan</i>	<i>barbakkitinan</i>	<i>barbattarinan</i>
Comparative	<i>barbappitina:gar</i>	<i>barbakkitina:gar</i>	<i>barbattarina:gar</i>

semantic roles, the former being more frequent than the latter. As for temporal reference, the participle form refers to current events or regularly happening events.

- (264) *Min bu dojdu ki:h-in il-bat*
 1SG.PRO this world girl-POSS.3SG.ACC take-NEG.PTCP.PRS
kihi-bin.
 human-1SG
 'I am a person who does not take a girl of this world [as wife].'
 (BaRD_1930_DaughterOfUrungAjyy_flk.006)

- (265) [...] *köstü-bet* *hirga-ga* *min-n-e*.
be.visible-NEG.PTCP.PRS sledge-DAT/LOC mount-PST1-3SG
‘[The boy stretched out his hand, grabbed the rein] and mounted the
invisible sledge.’
(AkEE_19XX_BoySister_flk.110)

Besides modifying a nominal, the negative present participle forms complement clauses (see Section 9.3.1). Finally, one past tense form, the negative past progressive, is based on the negative present participle (see Section 6.4.2.5).

6.3.1.3 Postterminal Past Participle

The postterminal past participle has the morpheme -BIT, which exhibits altogether 36 allomorphs, displayed in Chart 75. Since the suffix vowel is high, its allophones are *i*, *ɨ*, *u* and *ü* depending on vowel harmony. The suffix-initial consonant is subject to consonant assimilations and can be *b* (when attached to vowel stems and consonant stems with a voiced non-nasal stem-final consonant), *p* (when attached to consonant stems with a voiceless stem-final consonant) and *m* (when attached to consonant stems with a stem-final nasal consonant). The suffix-final consonant *t* may change into *p* (when a suffix beginning with a labial consonant is added; mostly first-person suffixes) and *k* (when a suffix beginning with a velar consonant is added; mostly second-person suffixes).

CHART 75 Allomorphs of the postterminal past participle

Preceding environment	Allomorphs	Following environment
V, C _{+voice} , -nas	- <i>bit</i> , - <i>bit</i> , - <i>but</i> , - <i>büt</i>	#, V, C _{-lab} , -vel
V, C _{+voice} , -nas	- <i>bip</i> , - <i>bip</i> , - <i>bup</i> , - <i>büp</i>	C _{+lab}
V, C _{+voice} , -nas	- <i>bik</i> , - <i>bik</i> , - <i>buk</i> , - <i>bük</i>	C _{+vel}
C _{-voice}	- <i>pit</i> , - <i>pit</i> , - <i>put</i> , - <i>püt</i>	#, V, C _{-lab} , -vel
C _{-voice}	- <i>pip</i> , - <i>pip</i> , - <i>pup</i> , - <i>püp</i>	C _{+lab}
C _{-voice}	- <i>pik</i> , - <i>pik</i> , - <i>puk</i> , - <i>pük</i>	C _{+vel}
C _{+voice} , +nas	- <i>mit</i> , - <i>mit</i> , - <i>mut</i> , - <i>müt</i>	#, V, C _{-lab} , -vel
C _{+voice} , +nas	- <i>mip</i> , - <i>mip</i> , - <i>mup</i> , - <i>müp</i>	C _{+lab}
C _{+voice} , +nas	- <i>mik</i> , - <i>mik</i> , - <i>muk</i> , - <i>mük</i>	C _{+vel}

CHART 76 Non-inflected forms of the postterminal past participle

Verbal stem	Postterminal past participle
<i>bar-</i> ‘go’	<i>barbit</i>
<i>kap-</i> ‘catch’	<i>kappit</i>
<i>ogus-</i> ‘beat’	<i>oksubut</i>
<i>utuj-</i> ‘sleep’	<i>utujbut</i>
<i>aha:-</i> ‘eat’	<i>aha:bit</i>
<i>diē-</i> ‘say’	<i>diēbit^a</i>

a The form *diēbit* has additionally the free variant *di:bit*; likewise *hiēbit* (< *hiē-* ‘eat’) can be realized as *hi:bit* (see Section 2.1 for diphthongs and their realization). Since this is not systematically connected to the verb forms as such, the forms are not discussed in what follows.

Additionally, polysyllabic stems like *ogus-* ‘beat’ may exhibit metathesis (see Section 2.5.4). In this case, the suffix-initial consonant is *b*. Finally, stem-final coronals assimilate to the suffix-initial consonant changing to *p*, e.g. *eppit* < *et-* ‘speak; say’. Chart 76 shows the forms of the postterminal past participle.

Chart 77 and Chart 78 show inflected forms of the postterminal past participle. In the dative-locative case and in combination with first- and second-person possessive suffixes, consonant assimilations do occur.

The postterminal past participle modifies nouns, forming potentially relative clauses. The modified noun can be interpreted as both agent (266) and

CHART 77 Inflection of the postterminal past participle
I (case & number)

	Case	Case & number
Nominative	<i>barbit</i>	<i>barbittar</i>
Accusative	<i>barbiti</i>	<i>barbittari</i>
Dative-locative	<i>barbikka</i>	<i>barbittarga</i>
Ablative	<i>barbittan</i>	<i>barbittartan</i>
Instrumental	<i>barbitinan</i>	<i>barbittarinan</i>
Comparative	<i>barbitta:gar</i>	<i>barbittarda:gar</i>

CHART 78 Inflection of the postterminal past participle II (case & possession)

	1SG	2SG	3SG
Nominative	<i>barbitim</i>	<i>barbitij</i>	<i>barbita</i>
Accusative	<i>barbippin</i>	<i>barbikkin</i>	<i>barbitin</i>
Dative-locative	<i>barbippar</i>	<i>barbikkar</i>	<i>barbitigar</i>
Ablative	<i>barbippittan</i>	<i>barbikkittan</i>	<i>barbitittan</i>
Instrumental	<i>barbippinan</i>	<i>barbikkinan</i>	<i>barbitinan</i>
Comparative	<i>barbippina:gar</i>	<i>barbikkina:gar</i>	<i>barbitina:gar</i>

	1PL	2PL	3PL
Nominative	<i>barbippit</i>	<i>barbikkit</i>	<i>barbittara</i>
Accusative	<i>barbippitin</i>	<i>barbikkitin</i>	<i>barbittarin</i>
Dative-locative	<i>barbippitigar</i>	<i>barbikkitigar</i>	<i>barbittarigar</i>
Ablative	<i>barbippitittan</i>	<i>barbikkitittan</i>	<i>barbittarittan</i>
Instrumental	<i>barbippitinan</i>	<i>barbikkitinan</i>	<i>barbittarinan</i>
Comparative	<i>barbippitina:gar</i>	<i>barbikkitina:gar</i>	<i>barbittarina:gar</i>

patient (267) of the given event. In contrast to the present participles, both readings are equally common in the case of the postterminal past participle.

- (266) *Hiet-en ill-e-bit törö:-büt d'aktar-i,*
 lead-CVB.SEQ take.away-PRS-1PL give.birth-PTCP.PST woman-ACC
ogo-lom-mut d'aktar-i.
 child-VBZ-PTCP.PST woman-ACC
 'We are leading the woman away who has given birth, the woman who
 has gotten a child.'
 (SuAA_20XX_Birth_nar.083)

- (267) *Bulta:-bit bul-pun hajin-i biha*
 hunt-PTCP.PST haul-POSS.1SG.ACC summer-ACC during
ah-iäk-kit.
 eat-FUT-2PL
 'During the summer, you will eat the food I have hunted.'
 (BoND_1964_ThreeBrothers_flk.010)

The postterminal past participle also forms further subordinate clauses, especially complement clauses and temporal adverbial clauses (see Section 9.3). Moreover, one analytic verb form (pluperfect) is based on the postterminal past participle (see Section 6.4.2.4).

6.3.1.4 Negative Postterminal Past Participle

The negative postterminal past participle has the morpheme -BA_{TAK}, which exhibits the 24 allomorphs displayed in Chart 79. Diachronically, the form combines the negative suffix -BA and the conditional participle -TAK. The suffix vowels are low so that their allophones are *a*, *e*, *o* and *ö* depending on vowel harmony. The suffix-initial consonant is subject to consonant assimilations and can be *b* (when attached to vowel stems and consonant stems with a voiced non-nasal stem-final consonant), *p* (when attached to consonant stems with a voiceless stem-final consonant) and *m* (when attached to consonant stems with a stem-final nasal consonant). Additionally, polysyllabic stems may exhibit metathesis; in this case, the suffix-initial consonant is *b*. The suffix-final consonant is *k* before consonant-initial suffixes, but *g* before vowel-initial suffixes Chart 80 shows non-inflected forms of the negative postterminal past participle.

Like the affirmative postterminal past participle (see Section 6.3.1.3), the negative postterminal past participle is regularly inflected for case, number and possession. Chart 81 and Chart 82 show the inflected forms of the negative postterminal past participle.

CHART 79 Allomorphs of the negative postterminal past participle

Preceding environment	Allomorphs	Following environment
V, C _{+voice} , -nas	<i>-batak, -betek, -botok, -böök</i>	#, C
V, C _{+voice} , -nas	<i>-batag, -beteg, -botog, -böög</i>	V
C _{-voice}	<i>-patak, -petek, -potok, -pöök</i>	#, C
C _{-voice}	<i>-patag, -peteg, -potog, -pöög</i>	V
C _{+voice} , +nas	<i>-matak, -metek, -motok, -möök</i>	#, C
C _{+voice} , +nas	<i>-matag, -meteg, -motog, -möög</i>	V

CHART 80 Non-inflected forms of the negative
 postterminal past participle

Verbal stem	Negative postterminal past participle
<i>bar-</i> ‘go’	<i>barbatak</i>
<i>kap-</i> ‘catch’	<i>kappatak</i>
<i>ogus-</i> ‘beat’	<i>oksubatak</i>
<i>utuj-</i> ‘sleep’	<i>utujbatak</i>
<i>aha:-</i> ‘eat’	<i>aha:batak</i>
<i>dîe-</i> ‘say’	<i>dîebetek</i>

CHART 81 Inflection of the negative postterminal past participle I
 (case & number)

	Case	Case & number
Nominative	<i>barbatak</i>	<i>barbaktar</i>
Accusative	<i>barbatagi</i>	<i>barbaktari</i>
Dative-locative	<i>barbatakka</i>	<i>barbaktarga</i>
Ablative	<i>barbaktan</i>	<i>barbaktartan</i>
Instrumental	<i>barbataginan</i>	<i>barbaktarinan</i>
Comparative	<i>barbaktaga:gar</i>	<i>barbaktarda:gar</i>

CHART 82 Inflection of the negative postterminal past participle II (case & possession)

	1SG	2SG	3SG
Nominative	<i>barbatagim</i>	<i>barbatagin</i>	<i>barbataga</i>
Accusative	<i>barbatakpîn</i>	<i>barbatakkîn</i>	<i>barbatagin</i>
Dative-locative	<i>barbatakpâr</i>	<i>barbatakkâr</i>	<i>barbatagigar</i>
Ablative	<i>barbatakpittan</i>	<i>barbatakkittan</i>	<i>barbatagittan</i>
Instrumental	<i>barbatakpînan</i>	<i>barbatakkînan</i>	<i>barbataginan</i>
Comparative	<i>barbatakpîna:gar</i>	<i>barbatakkîna:gar</i>	<i>barbatagina:gar</i>

CHART 82 Inflection of the negative postterminal past participle II (case & possession) (*cont.*)

	1PL	2PL	3PL
Nominative	<i>barbatakpit</i>	<i>barbatakkit</i>	<i>barbaktara</i>
Accusative	<i>barbatakpitin</i>	<i>barbatakkitin</i>	<i>barbaktarin</i>
Dative-locative	<i>barbatakpitigar</i>	<i>barbatakkitigar</i>	<i>barbaktarigar</i>
Ablative	<i>barbatakpitittan</i>	<i>barbatakkitittan</i>	<i>barbaktarittan</i>
Instrumental	<i>barbatakpitinan</i>	<i>barbatakkitinan</i>	<i>barbaktarinan</i>
Comparative	<i>barbatakpitina:gar</i>	<i>barbatakkitina:gar</i>	<i>barbaktarina:gar</i>

Like its affirmative counterpart, the negative postterminal past participle can modify nominals, whereby the relativized noun may play both agent (268) and patient (269) semantic roles in the given event.

- (268) *Sav'etskaj bila:s pal'it'ika-tin gitta*
Soviet power policy-POSS.3SG.ACC with
höbüle-s-petek kihi-ler-iñ manna bunt
agree-COOP-NEG.PTCP.PST human-PL-POSS.2SG here riot
taha:r-bit-tara.
take.out-PST2-3PL
'People, who did not agree with the Soviet power's policy, made a riot here.'
(MaPX_KuNS_200X_YakutsOfEssej_conv.MaPX.029)

- (269) *Učum, bil-betek kötör-büt a:s-t-a.*
quiet know-NEG.PTCP.PST bird-POSS.1PL pass.by-PST1-3SG
'Quiet, an unknown bird has passed by.'
(PoNA_1970_NeverSeenBird_nar.062)

Additionally, the negative postterminal past participle is involved in forming complement clauses (see Section 9.3.1). Finally, the negative pluperfect is formed based on the negative postterminal past participle (see Section 6.4.2.4).

6.3.1.5 Future Participle

The future participle has the morpheme -IAK with eight regular allomorphs, the diphthong being subject to vowel harmony and the suffix-final *k* being voiced intervocally. Idiolectally, the suffix-final *k* can change to *p* when a first-person suffix starting with a labial consonant is attached. However, this

CHART 83 Future participle

Verbal stem	Future participle (long form)	Future participle (short form)
<i>bar-</i> 'go'	<i>bariāk</i>	<i>bariā</i>
<i>kap-</i> 'catch'	<i>kabiāk</i>	<i>kabiā</i>
<i>ogus-</i> 'beat'	<i>oksūōk</i>	<i>oksūō</i>
<i>utuj-</i> 'sleep'	<i>utujūōk</i>	<i>utujūō</i>
<i>aha-</i> 'eat'	<i>ahiāk</i>	<i>ahiā</i>
<i>dīe-</i> 'say'	<i>dīek</i>	<i>dīē</i>

is never mandatory. Additionally, the suffix-final *k* is deleted in some contexts, and the form is contracted. When the suffix is attached to a consonant stem, the stem-final consonants *p* and *k* show intervocalic voicing and *s* alternates with *h*. Moreover, polysyllabic consonant stems may exhibit vowel syncope. Chart 83 shows the non-inflected forms of the future participle.

Chart 84 and Chart 85 show the inflection of the future participle. Both long and short forms also occur in the inflected forms, which is especially relevant and frequent in the dative-locative and accusative cases combined with possessive suffixes. Moreover, at morpheme boundaries, consonant assimilations can occur.

CHART 84 Inflection of the future participle I (case & number)

	Case	Case & number
Nominative	<i>bariāk</i>	<i>bariāktar</i>
Accusative	<i>bariāgi</i>	<i>bariāktari</i>
Dative-locative	<i>bariākka</i>	<i>bariāktarga</i>
Ablative	<i>bariāktan</i>	<i>bariāktartan</i>
Instrumental	<i>bariāginan</i>	<i>bariāktarinan</i>
Comparative	<i>bariākta:gar</i>	<i>bariāktarda:gar</i>

CHART 85 Inflection of the future participle II (case & possession)

	1SG	2SG	3SG
Nominative	<i>bariāgim ~ bariām</i>	<i>bariāgiŋ ~ bariāŋ</i>	<i>bariāga ~ bariā</i>
Accusative	<i>bariākp̄in ~ bariāpp̄in</i>	<i>bariākk̄in</i>	<i>bariāḡin ~ bariān</i>
Dative-locative	<i>bariāk̄par ~ bariāpp̄ar</i>	<i>bariākk̄ar</i>	<i>bariāḡigar ~ bariār</i>
Ablative	<i>bariākp̄ittan ~ bariāpp̄ittan</i>	<i>bariākk̄ittan</i>	<i>bariāḡittan</i>
Instrumental	<i>bariākp̄inan ~ bariāpp̄inan</i>	<i>bariākk̄inan</i>	<i>bariāḡinan</i>
Comparative	<i>bariākp̄ina:gar ~ bariāpp̄ina:gar</i>	<i>bariākk̄ina:gar</i>	<i>bariāḡina:gar</i>

	1PL	2PL	3PL
Nominative	<i>bariākp̄it ~ bariāpp̄it</i>	<i>bariākk̄it</i>	<i>bariākt̄ara</i>
Accusative	<i>bariākp̄itin ~ bariāpp̄itin</i>	<i>bariākk̄itin</i>	<i>bariākt̄arin</i>
Dative-locative	<i>bariākp̄itigar ~ bariāpp̄itigar</i>	<i>bariākk̄itigar</i>	<i>bariākt̄arigar</i>
Ablative	<i>bariākp̄ittitan ~ bariāpp̄ittitan</i>	<i>bariākk̄ittitan</i>	<i>bariākt̄arittan</i>
Instrumental	<i>bariākp̄itinan ~ bariāpp̄itinan</i>	<i>bariākk̄itinan</i>	<i>bariākt̄arinan</i>
Comparative	<i>bariākp̄itina:gar ~ bariāpp̄itina:gar</i>	<i>bariākk̄itina:gar</i>	<i>bariākt̄arina:gar</i>

In contrast to the present and past participles, the future participle rarely modifies nominals. In the predicate position, however, the future participle is quite regularly used together with the noun *kihi* ‘human’, like in the examples (270) and (271). In this context, *kihi* almost entirely loses its semantics.

- (270) *Kihi kečeh-iek e-t-e kajtak ere.*
 human fear-PTCP.FUT be-PST1-3SG how INDF
 ‘It was somehow frightening.’
 (BeEI_KuNS_1998_Teacher_conv.BeEI.047)

- (271) *“Beje-ŋ igir-bit-iŋ”, d-i:r, “kihi kül-üök.”*
 self-POSS.2SG call-PST2-2SG say-PRS.3SG human laugh-PTCP.FUT
 “‘You did call it [= a reindeer] yourself”, she says, “[it is] funny.”
 (PoTY_2009_Aku_nar.074)

Like the other participle forms, the future participle forms subordinate clauses, mainly complement but also purpose clauses (see Section 9.3). Additionally, the future participle forms a couple of analytic mood forms. Combined with the particle *na:da* ‘need to; necessary’ and the propriative suffix -LA:K, respectively,

it forms two necessitative moods (see Section 6.5.7). Combined with the auxiliary verb *e-* and the negative existential noun *huōk*, the future participle forms the counterfactual mood (see Section 6.5.5). Finally, the intentional mood combines the future participle with predicative and imperative person-number endings (see Section 6.5.8).

The future participle does not have a negative counterpart. If the future participle is negated, the negative suffix *-(I)m-* is added before the participle suffix.

- (272) *D'e ol iriā-lar-i ihille:-m-iek-ke*
well that song-PL-ACC listen-NEG-PTCP.FUT-DAT/LOC
ginner, [...].
3PL.PRO
'And so that they do not listen to those songs, [they simply [called them] wreckers and something, they took away our people].'
(LaVN_KuNS_1999_MusicRepressions_conv.LaVN.040)

6.3.1.6 Habitual Participle

The habitual participle has the morpheme *-A:ččI* with altogether eight allomorphs: to consonant stems, *-a:ččī*, *-e:ččī*, *-o:čču* and *-ö:ččü* are attached, whereas *-ččī*, *-ččī*, *-čču* and *-ččü* occur after vowel stems. When the suffix is attached to a consonant stem, the stem-final consonants *p* and *k* show intervocalic voicing, and *s* alternates with *h*. Moreover, polysyllabic consonant stems may exhibit syncope of the vowel of non-first syllables. As for its origin, the habitual participle is of Mongolic provenance (Kałużyński 1961: 70). Chart 86 shows the non-inflected forms of the habitual participle.

CHART 86 Non-inflected forms of the habitual participle

Verbal stem	Habitual participle
<i>bar-</i> 'go'	<i>bara:ččī</i>
<i>kap-</i> 'catch'	<i>kaba:ččī</i>
<i>ogus-</i> 'beat'	<i>okso:čču</i>
<i>utuj-</i> 'sleep'	<i>utuja:ččī</i>
<i>aha-</i> 'eat'	<i>aha:ččī</i>
<i>diē-</i> 'say'	<i>diēččī</i>

The habitual participle can theoretically be inflected for case, number and possession—however, such forms seldom occur in natural speech. Nevertheless, the complete paradigms are given here, although by far not all forms are attested in the analyzed material. Chart 87 and Chart 88 show the inflection of the habitual participle for number, case and possession.

CHART 87 Inflection of the habitual participle I (case & number)

	Case	Case & number
Nominative	<i>bara:čči</i>	<i>bara:ččilar</i>
Accusative	<i>bara:ččini</i>	<i>bara:ččilari</i>
Dative-locative	<i>bara:ččiga</i>	<i>bara:ččilarga</i>
Ablative	<i>bara:ččittan</i>	<i>bara:ččilartan</i>
Instrumental	<i>bara:ččinan</i>	<i>bara:ččilarinan</i>
Comparative	<i>bara:ččita:gar</i>	<i>bara:ččilarda:gar</i>

CHART 88 Inflection of the habitual participle II (case & possession)

	1SG	2SG	3SG
Nominative	<i>bara:ččim</i>	<i>bara:ččiŋ</i>	<i>bara:ččita</i>
Accusative	<i>bara:ččibin</i>	<i>bara:ččigin</i>	<i>bara:ččitin</i>
Dative-locative	<i>bara:ččibar</i>	<i>bara:ččigar</i>	<i>bara:ččitigar</i>
Ablative	<i>bara:ččibittan</i>	<i>bara:ččigittan</i>	<i>bara:ččitittan</i>
Instrumental	<i>bara:ččibinan</i>	<i>bara:ččiginan</i>	<i>bara:ččitinan</i>
Comparative	<i>bara:ččibina:gar</i>	<i>bara:ččigina:gar</i>	<i>bara:ččitina:gar</i>

	1PL	2PL	3PL
Nominative	<i>bara:ččibit</i>	<i>bara:ččigit</i>	<i>bara:ččilara</i>
Accusative	<i>bara:ččibitin</i>	<i>bara:ččigitin</i>	<i>bara:ččilarin</i>
Dative-locative	<i>bara:ččibitigar</i>	<i>bara:ččigitigar</i>	<i>bara:ččilarigar</i>
Ablative	<i>bara:ččibitittan</i>	<i>bara:ččigitittan</i>	<i>bara:ččilarittan</i>
Instrumental	<i>bara:ččibitinan</i>	<i>bara:ččigitinan</i>	<i>bara:ččilarinan</i>
Comparative	<i>bara:ččibitina:gar</i>	<i>bara:ččigitina:gar</i>	<i>bara:ččilarina:gar</i>

Unlike the participles discussed before, the habitual participle only seldom modifies nominals, forming relative clauses. Sentences like example (273) may occur but are not frequent.

- (273) *Dogot-tor, ma:jdi ka:ji:-ga birag-a:čči*
 friend-PL recently prison-DAT/LOC throw-PTCP.HAB
kīhi-gitin kōr-ūŋ d'e.
 human-POSS.2PL.ACC see-IMP.2PL PTCL
 ‘Guys, look after the person [you have] recently imprisoned, then.’
 (PoXN_19701118_Chopochuka_flk.105)

The habitual participle is also reported to derive agent nouns from verbs (Artem'ev 2013b: 176). Again, this function may be observed but not very frequently.

- (274) *Ma: kurum-na:-čči-lara aha:-bit-tara du,*
 this wedding-VBZ-PTCP.HAB-POSS.3PL eat-PST2-3PL Q
aha:-batak-tara du, h-onon ka:l-bit-tara.
 eat-NEG.PST2-3PL Q EMPH-SO stay-PST2-3PL
 ‘These people who celebrated the wedding ate or not, and they stayed [there].’
 (KiMN_19900417_Milkmaid_flk.120)

Hence, as Stapert (2013: 218–224) showed convincingly, the nominal and adjectival functions of the habitual participle in Dolgan are—in contrast to Sakha—marginal. In turn, the habitual participle forms the base for the present and past habitual forms (see Sections 6.4.5 and 6.4.6) so that it is involved in the construction of tense-aspect forms.

The examples above and the discussion in Sections 6.4.5 and 6.4.6 show that the given forms do not solely have habitual functions. However, given the available habitual functions and traditional terminology, the item is still labelled as habitual participle here.

6.3.1.7 Conditional Participle

The conditional participle has the morpheme -TAK with theoretically 32 possible allomorphs, out of which, however, only 16 allomorphs occur regularly. Expectedly, the vowel of the suffix is subject to vowel harmony. The suffix-initial consonant is *t* (when added to vowel stems and consonant stems ending with a voiceless consonant), *d* (when added to consonant stems ending with a voiced non-nasal, non-lateral consonant), *n* (when added to consonant stems ending

with a nasal consonant) and *l* (when added to consonant stems ending with *l*). Theoretically, if vowel-initial suffixes were attached, the suffix-final *k* could be voiced. However, only dative-locative forms (formed with -GA) of the conditional participle appear in the analyzed material, whence this seems to have no practical relevance. Contrary to many other verb forms, the conditional participle shows no metathesis in the stem. Chart 89 summarizes the effectively occurring allomorphs of the conditional participle, and Chart 90 shows the dative-locative case forms of the conditional participle.

CHART 89 Allomorphs of the conditional participle

Preceding environment	Allomorphs
V, C _{-voice}	<i>-tak, -tek, -tok, -tök</i>
C _{+voice, -nas, -lat}	<i>-dak, -dek, -dok, -dök</i>
C _{+voice, +nas}	<i>-nak, -nek, -nok, -nök</i>
C _{+voice, +lat}	<i>-lak, -lek, -lok, -lök</i>

CHART 90 Dative-locative case forms of the conditional participle

Verbal stem	Conditional participle
<i>bar-</i> ‘go’	<i>bardakka</i>
<i>kap-</i> ‘catch’	<i>kaptakka</i>
<i>ogus-</i> ‘beat’	<i>ogustakka</i>
<i>utuj-</i> ‘sleep’	<i>utujdakka</i>
<i>aha-</i> ‘eat’	<i>aha:takka</i>
<i>diē-</i> ‘say’	<i>diētekke</i>

The dative-locative form of the conditional participle is used in impersonal factual/implicative conditionals of the type “if one does X...” like in example (275).

- (275) *Kas* *vnuk-ta:k-kin=ij*, *ogo-lor-uy*
 how.many grandchild-PROPR-2SG=Q child-PL-POSS.2SG
ogo-lorun *a:k-tak-ka?*
 child-POSS.3PLACC count-PTCP.COND-DAT/LOC
 'How many grandchildren do you have, if one counts your children's
 children?'
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.064)

Moreover, the conditional participle forms diachronically the base for the conditional-temporal mood (see Section 6.5.2).

6.3.1.8 Abessive Participle

Finally, there is the abessive participle -A *ilik* ~ -I: *ilik* ~ -Alik ~ -I:lik. Its cognates in other Turkic languages have also been called a *participium nondum facti* (e.g. in the case of Sakha, see Stachowski & Menz 1998: 427) and a *cunctative participle* (e.g. in the case of Khakas, see Malceva & Sokur 2021). Here, the term *abessive* is chosen since it appears to be more central to express that an event is absent at a given time point and not that it has been retarded. Given this, the abessive participle expresses events that have not taken place yet. Synchronically, the form can best be analyzed as the combination of the simultaneous converb -A ~ -I: (see Section 6.3.2.2) and the particle *ilik* 'not yet'.¹ The particle can stand separately but can also be amalgamated with the suffix of the simultaneous converb. It is important to note that vowel harmony does not apply in the latter case. As for consonants at the morpheme boundary, the usual morphonological processes apply when the participle is attached, i.e. intervocalic voicing, debuccalization *s* > *h*, vowel syncope. Given the composition of the form, they are the same as in the case of the simultaneous converb so that the explanations provided in Section 6.3.2.2 hold here, too.

As for glossing, the non-contracted variants are represented as, e.g. *bar-a ilik* 'go-CVB.SIM not.yet', whereas the contracted variants are glossed as, e.g. *bar-alik* 'go-PTCP.ABE'. This choice is, to some extent, arbitrary and incoherent. However, glossing the particle *ilik* as 'PTCP.ABE' in the non-contracted forms would neglect the constituting role of the simultaneous converb marker -A ~ -I:. Chart 91 shows the forms of the abessive participle in Dolgan.

The abessive participle can synchronically not be inflected for case and possession. However, the diminutive and intensifying suffix -kA:N (see Section 12.1)

1 For a diachronic approach to the form see the detailed paper of Schönig (2007), which basically supports the given explanation of the form (admittedly for Sakha, but given the identical forms in both languages, it can be transferred to Dolgan, too).

CHART 91 Forms of the abessive participle

Verbal stem	Abessive participle
<i>bar-</i> ‘go’	<i>bara ilik ~ baralik</i>
<i>kap-</i> ‘catch’	<i>kaba ilik ~ kabalik</i>
<i>ogus-</i> ‘beat’	<i>okso ilik ~ oksolik</i>
<i>utuj-</i> ‘sleep’	<i>utuja ilik ~ utujalik</i>
<i>aha:-</i> ‘eat’	<i>ahi: ilik ~ ahi:lik</i>
<i>diē-</i> ‘say’	<i>di: ilik ~ di:lik</i>

can be attached to the form and gives it an insistent connotation. -kA:N being a derivational suffix attached to nominals, this is a good argument for analyzing the abessive participle indeed as a participle. Moreover, the abessive participle can modify nouns forming relative clauses.

- (276) *Horok pastu:k bu tör-ü:lik taba-ni*
some shepherd this give.birth-PTCP.ABE reindeer-ACC
ill-er.
take.away-PRS.3SG
‘Some shepherds bring away the reindeer, which have not calved yet.’
(KiMN_1975_ReindeerHerdin_g_nar.038)

Finally, the abessive participle is the base for two finite tense-aspect forms, here labelled *abessive* and *past abessive* (see Sections 6.4.7 and 6.4.8) as well as for one finite mood form, here called *abessive conditional-temporal* (see Section 6.5.3).

6.3.2 *Converbs*

Converbs are verbal forms that primarily fulfil the syntactic function of adverbs, modifying another verb. There are seven different converbs in Dolgan, which are listed in Chart 92.

By modifying other verbs, converbs may form subordinate adverbial clauses (see Section 9.3.3). Some converbs (first and foremost, the sequential and the simultaneous converb) also form clause chains, discussed in detail in Section 9.1 from a syntactic point of view. In contrast to participles, converbs are not inflected for case, number and possession but can take verbal person-number endings from set 1 (predicative endings) in some cases. Moreover, the sequential and the simultaneous converbs form so-called postverbal constructions

CHART 92 Converb inventory

Converb	Morpheme
sequential converb	-An
simultaneous converb	-A ~ -I:
negative simultaneous converb	-BAkkA
anterior converb	-A:t
modal converb	-BIččA
purposive converb	-A:rI
negative converb	-(I)m(I)nA ~ -(I)mIn'A ~ -(I)mIjA

(also known as aspectual converb constructions, serial verbs, light verbs, verb sequences; see Section 6.4.9). In what follows, the formal and functional features of each converb are discussed separately; as for their interplay with syntax, however, see Chapter 9.

6.3.2.1 Sequential Converb

The sequential converb has the suffix -An, which has five allomorphs. When added to consonant stems, the allomorphs *-an*, *-en*, *-on* and *-ön* are used; consequently, intervocalic voicing, the debuccalization *s > h*, and vowel syncope in polysyllabic stems apply. Idiolectally, the vowel in the suffix can be realized as a long vowel, the emerging morpheme being -A:n. Since this is an instance of free variation, neither functional nor formal rules can be formulated for its occurrence. When added to vowel and diphthong stems, the allomorph *-n* is used. Chart 93 shows the forms of the sequential converb.

CHART 93 Forms of the sequential converb

Verbal stem	Sequential converb
<i>bar-</i> ‘go’	<i>baran</i>
<i>kap-</i> ‘catch’	<i>kaban</i>
<i>ogus-</i> ‘beat’	<i>okson</i>
<i>utuj-</i> ‘sleep’	<i>utujan</i>
<i>aha:-</i> ‘eat’	<i>aha:n</i>
<i>diê-</i> ‘say’	<i>diên</i>

The sequential converb can take the personal endings from set 1 (predicative endings; see Section 6.2). This leads to two consonant assimilations: In the first person, -An changes to -Am, and in the second person, -An changes to -Aŋ. Chart 94 shows the sequential converb with personal endings.

CHART 94 Sequential converb
with personal endings

	<i>bar-</i> 'go'	<i>dîe-</i> 'say'
1SG	<i>barammin</i>	<i>dîemmin</i>
2SG	<i>barayŋin</i>	<i>dîeŋin</i>
3SG	<i>baran</i>	<i>dîen</i>
1PL	<i>barammit</i>	<i>dîemmit</i>
2PL	<i>barayŋit</i>	<i>dîeŋit</i>
3PL	<i>barannar</i>	<i>dîenner</i>

The sequential converb combines two events and expresses their consecutive-ness, forming clause chains (see Section 9.1 for details). The subjects of both verbs included are often co-referential, but sometimes there may also be two different subjects. The attachment of personal endings to the converb seems to be facultative if the subjects are co-referential ((277) and (278)), but obligatory if the subjects of both verbs differ (279).

- (277) *Luōtka kel-en giniler-i il-pit-e.*
 boat come-CVB.SEQ 3PL.PRO-ACC take-PST2-3SG
 'A boat came and took them.'
 (AsKS_19XX_Amulet_nar.208)

- (278) *Ol ih-em-mit ikki kihi-ni bul-lu-but.*
 that go-CVB.SEQ-1PL two human-ACC find-PST1-1PL
 'We went and found two people.'
 (PoKK_1964_TwoOrphanBoys_flk.270)

- (279) *Harsîerda tur-an-nar dîe-bit*
 in.the.morning stand.up-CVB.SEQ-3PL say-PST2.3SG
balti-lara: [...].
 younger.sibling-POSS.3PL

‘They stood up in the morning, and the younger brother said: [“Poldyen will guard the house”].’

(MiAI_1964_OldPeasantOldWoman_flk.175)

Moreover, the sequential converb forms postverbal constructions (see Section 6.4.9), in which the second verb loses its lexical meaning and barely adds an aspectual or actional value to the first verb. In this case, the sequential converb never takes personal endings.

- (280) *Kutujak hür-en ka:l-l-a.*
 mouse run-CVB.SEQ stay.AUX-PST1-3SG
 ‘The mouse ran off.’
 (AkEE_19900810_ReindeerMouse_flk.015)

Clause chains formed with the sequential converb are often ambiguous concerning their intended reading. For example (281), it can hardly be decided without regarding the extra-linguistic context, whether the person in question was figuratively sitting or not. Both given interpretations are possible regarding the sentence. For a detailed description of ambiguous verb sequences, see Section 6.4.9 as well as Däbritz (2019b).

- (281) *Ma-ni bir ki:s-ka hergesteh-en*
 that-ACC one girl-DAT/LOC come.close-CVB.SEQ
olor-d-o.
 sit.down(.AUX)-PST1-3SG
 ‘Then he came closer to one girl and sat down.’ ~ ‘Then he (constantly) came closer to one girl.’
 (BaRD_YaP_1930_HumanInAnotherWorld_flk.013)

Finally, one instance of grammaticalization and one instance of lexicalization shall be mentioned. First, the sequential converb of the verb *bar-* ‘go’ has developed into the postposition *baran* ~ *bara:n* ‘after’, which still mainly combines with the sequential converb of the preceding verb and forms temporal clauses (see Section 9.3.3.1).

- (282) *Kelîeb-i bih-itala:n baran il-l-a.*
 bread-ACC cut-MULT-CVB.SEQ after take-PST1-3SG
 ‘[After] having cut the bread [into slices], she took [it].’
 (BaA_1930_OldManOldWoman_flk.049)

Second, the sequential converb of the verb *dîe*- ‘say’ is often used as a quotative particle (see Section 10.5) and a particle with the meaning ‘called; named’ like in example (283).

- (283) *Törö:-büüt-üm Popigaj dîe-n hir-ge.*
be.born-PST2-1SG **Popigay say-CVB.SEQ** place-DAT/LOC
‘I was born at a place called Popigay.’
(BeSN_2009_Family_nar.002)

In a phonetically slightly different shape, namely *din*, the same form occurs as an emphatic particle that underlines the correctness of the proposition of the clause.

- (284) *“Beje-git baj-git dî:n”, d-i:-bin.*
self-POSS.2PL wealth-POSS.2PL **EMPH** say-PRS-1SG
“‘[It is] your own wealth, though’, I say.’
(ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.073)

6.3.2.2 Simultaneous Converb

The simultaneous converb is formed with the suffixes -A and -I-. Like the suffixes of the present participle (see Section 6.3.1.1), the suffixes trace back to two different forms, namely to Proto-Turkic *-A and *-jU, respectively (Károly 2009: 350; Johanson 2021: 751). The former variant is attached to consonant stems, causing intervocalic voicing, the debuccalization *s* > *h*, and vowel syncope in polysyllabic stems. The latter variant is attached to vowel and diphthong stems, whereby the stem-final vowel or diphthong is deleted. Chart 95 shows the forms of the simultaneous converb.

CHART 95 Forms of the simultaneous converb

Verbal stem	Simultaneous converb
<i>bar</i> - ‘go’	<i>bara</i>
<i>kap</i> - ‘catch’	<i>kaba</i>
<i>ogus</i> - ‘beat’	<i>okso</i>
<i>utuj</i> - ‘sleep’	<i>utuja</i>
<i>aha</i> - ‘eat’	<i>ahi:</i>
<i>dîe</i> - ‘say’	<i>dî:</i>

Formally, the personal endings from set 1 (predicative endings) can be attached to the simultaneous converb. In natural Dolgan speech, this is, however, very rare. The reason for this is that the emerging forms are homonymous with the first- and second-person present tense forms (see Section 6.4.1). Nevertheless, Chart 96 shows the simultaneous converb with personal endings.

CHART 96 Simultaneous converb with personal endings

	<i>bar-</i> ‘go’	<i>diē-</i> ‘say’
1SG	<i>barabin</i>	<i>di:bin</i>
2SG	<i>baragin</i>	<i>di:gin</i>
3SG	<i>bara</i>	<i>di:</i>
1PL	<i>barabit</i>	<i>di:bit</i>
2PL	<i>baragit</i>	<i>di:git</i>
3PL	<i>baralar</i>	<i>di:ler</i>

The simultaneous converb primarily expresses two events happening in parallel. Syntactically, the emerging constructions are in most cases analyzed as clause chains in this grammar (see Section 9.1 for details). The subjects of both verbs are most often co-referential, which is not surprising given the low frequency of person-number marking at the simultaneous converb.

- (285) *It-i-it-i: utuj-a-bin, [...].*
cry-CVB.SIM-cry-CVB.SIM fall.asleep-PRS-1SG
‘Crying I fall asleep, [I am afraid of my husband, I sleep with clothes on].’
(KiPP_NN2_2009_Family_nar.KiPP.028)

Sometimes the simultaneous converb can also convey a purposive reading of the emerging clause chain like in example (286). Given the syntactic similarity to the pattern in example (285), it is argued in Section 9.3 that relevant instances are not to be analyzed as subordinate purpose clauses but still as clause chains.

- (286) *Harsâarda ogonn’or ikt-i: taks-ar.*
in.the.morning old.man pee-CVB.SIM go.out-PRS.3SG
‘In the morning, the old man goes out for peeing.’
(YaP_1930_GroomFromUpperWorld_flk.024)

The simultaneous converb also forms postverbal constructions (see Section 6.4.9). In this case, the second verb of the sequence loses its semantic content and purely modifies the preceding verb's aspectual or actional content.

- (287) [...], *perine-te* *köt-ö* *tur-ar*
 feather.bed-POSS.3SG fly-CVB.SIM stand.AUX-PTCP.PRS
e-bit.
 AUX-PST2.3SG
 '[The old woman Taal ran out], her feather bed was flying apparently.'
 (PrG_1964_OldWomanTaal_flk.007)

Often these verb sequences are ambiguous with respect to their interpretation (see Section 6.4.9 and Däbritz 2019b for details). In example (288), it cannot be decided whether the person in question is in fact sitting or not, and both given interpretations are either likely.

- (288) *Onton Rita onno d'end'i-nnan o:nn'-u: olor-or*
 then Rita there Dendy-INS play-CVB.SIM sit(AUX)-PTCP.PRS
e-t-e.
 AUX-PST1-3SG
 'Then Rita was sitting there and playing Dendy.'² ~ 'Then Rita was playing Dendy there.'
 (KuDP_2009_Fire_nar.003)

Moreover, the simultaneous converb takes part in verbal paradigm building. In combination with the particle *ilik*, the simultaneous converb forms the abessive participle -A *ilik* (see Section 6.3.1.8), which, in turn, is the base for other finite verb forms. Besides that, its first- and second-person forms are homonymous with the respective indicative present tense forms (see Section 6.4.1).

Finally, the simultaneous converb of the verb *dîe*- 'say', i.e. the form *dî*, is frequently used as an emphatic particle.

- (289) *D'e bu ba:l-lar dî.*
 well this EX-3PL EMPH
 'Well, here they are, though.'
 (ChGS_UoPP_20170724_SocCogOrder_conv.ChGS.048)

2 "Dendy" is a clone of the Japanese Nintendo NES console which was designed for the Russian market.

6.3.2.3 Negative Simultaneous Converb

The negative simultaneous converb is formed by the suffix -BAkka, which diachronically can be traced back to the dative-locative form of the negative present participle -BAT (see Section 6.3.1.2). The vowels of the suffix are subject to vowel harmony, and consonant assimilations at the morpheme boundary do apply: Its initial consonant is *b* when attached to vowel stems and consonant stems ending with a voiced non-nasal consonant; it is *p* when attached to consonant stems ending with a voiceless consonant; it is *m* when attached to consonant stems ending with a nasal consonant. Additionally, polysyllabic stems may exhibit metathesis; in this case, the suffix-initial consonant is *b*. Chart 97 shows the allomorphs of the negative simultaneous converb, and Chart 98 shows the forms of the negative simultaneous converb.

CHART 97 Allomorphs of the negative simultaneous converb

Preceding environment	Allomorphs
V, C _{+voice, -nas}	<i>-bakka, -bekke, -bokko, -bökkö</i>
C _{-voice}	<i>-pakka, -pekke, -pokko, -pökkö</i>
C _{+voice, +nas}	<i>-makka, -mekke, -mokko, -mökkö</i>

CHART 98 Forms of the negative simultaneous converb

Verbal stem	Negative simultaneous converb
<i>bar-</i> ‘go’	<i>barbakka</i>
<i>kap-</i> ‘catch’	<i>kappakka</i>
<i>ogus-</i> ‘beat’	<i>oksubakka</i>
<i>utuj-</i> ‘sleep’	<i>utujbakka</i>
<i>aha-</i> ‘eat’	<i>aha:bakka</i>
<i>diē-</i> ‘say’	<i>diēbekke</i>

The personal endings from set 1 (predicative endings) can principally be added to the negative simultaneous converb. In natural Dolgan speech, this occurs seldom and seems to be characteristic of the Lower Dolgan variety. In the analyzed material, these forms are only used by two speakers coming from Syndassko, i.e. from the north-easternmost Dolgan settlement. Whether this is due to chance

CHART 99 Negative simultaneous converb
with personal endings

	<i>bar-</i> ‘go’	<i>diē-</i> ‘say’
1SG	<i>barbakkabin</i>	<i>diēbekkebin</i>
2SG	<i>barbakkagin</i>	<i>diēbekkegin</i>
3SG	<i>barbakka</i>	<i>diēbekke</i>
1PL	<i>barbakkabit</i>	<i>diēbekkebit</i>
2PL	<i>barbakkagit</i>	<i>diēbekkegit</i>
3PL	<i>barbakkalar</i>	<i>diēbekkeler</i>

or indeed a dialectal feature cannot be finally answered here given the low frequency of the item and calls for further research. At least, this interpretation could be supported because Sakha also allows for suffixing the negative simultaneous converb with personal endings (Ubrjatova et al. 1982: 248), and Lower Dolgan is usually closer to Sakha than Upper Dolgan. For the sake of completeness, Chart 99 shows the negative simultaneous converb with personal endings—nonetheless, it has to be kept in mind that their occurrence is heavily constrained.

The negative simultaneous converb -Bakka is the functional counterpart of the simultaneous converb -A ~ -I-. Consequently, the negative simultaneous converb expresses that an event is not taking place parallel to another event. Thereby, the negative simultaneous converb forms subordinate adverbial clauses (see Section 9.3.3). The subjects in the main and the subordinate clause are almost always co-referential (290). Only one example in the analyzed material has different subjects (291).

- (290) *Ki:h-i-gar* *kel-en* *îedej-bekke* *čaj*
 girl-POSS.3SG-DAT/LOC come-CVB.SEQ hurry-NEG.CVB.SIM tea
is-pit.
 drink-PST2.3SG
 ‘He came to the girl and drank tea without hurrying.’
 (MiAI_1964_OldPeasantOldWoman_flk.280)
- (291) “[...] *d’îl-gin* *hip-pekke-gin*
 year-POSS.2SG.ACC reach-NEG.CVB.SIM-2SG
er-ge *bîer-di-m*,” *dîe-bit-e.*
 husband-DAT/LOC give-PST1-1SG say-PST2-3SG

“[I am dying, I made you a human, therefore, eh], though you do not reach the age, I will have you married”, she said.’
(KiPP_KuNS_200211_LifeChildren_conv.KiPP.019)

It could be expected that the negative simultaneous converb could also form part of postverbal constructions like the affirmative simultaneous converb (and the sequential converb) do. This is, however, not the case. Däbritz (2019b) has shown that postverbal constructions are hardly ever negated in Dolgan, whereby the reason for this constraint is yet unclear (see Section 6.4.9).

6.3.2.4 Anterior Converb

The anterior converb is formed with the suffix -A:t, which is subject to vowel harmony. If the suffix is attached to a consonant stem, it causes intervocalic voicing, the debuccalization *s* > *h* of the stem-final consonant and vowel syncope in polysyllabic stems. If it is attached to a vowel or diphthong stem, the suffix-initial vowel is deleted. As for its origin, the suffix of the anterior converb has a Mongolic provenance (Kałużyński 1961: 112). Chart 100 shows the forms of the anterior converb.

CHART 100 Forms of the
anterior converb

Verbal stem	Anterior converb
<i>bar-</i> ‘go’	<i>bara:t</i>
<i>kap-</i> ‘catch’	<i>kaba:t</i>
<i>ogus-</i> ‘beat’	<i>okso:t</i>
<i>utuj-</i> ‘sleep’	<i>utuja:t</i>
<i>aha-</i> ‘eat’	<i>aha:t</i>
<i>dîe-</i> ‘say’	<i>dîet</i>

Unlike other converbs, the anterior converb cannot be inflected with verbal person-number endings. Instead, it can take the respective possessive and accusative case suffixes because the anterior converb was historically combined with the postposition *gitta* ~ *kitta*, as it is still regularly in Sakha (Ubrjatova et al. 1982: 251). Given this, the question arises whether the form qualifies for a converb or is instead a participle or an action noun. However, synchronically, there are two arguments against the latter analyses. First, person-number

marking of the anterior converb is seldom in Dolgan and absent in the first and second persons at all. Neither does the postposition *gitta* ~ *kitta* occur with the item. Second, and more decisively, the anterior converb can never modify a nominal, as participles regularly do in Dolgan (see Section 6.3.1). Neither can it occur in argument position in the clause, which would be typical for an action noun. Chart 101 shows the person-number forms of the anterior converb. Note that the suffix-final *-t* undergoes regressive assimilation, turning into *p* in the first person and *k* in the second person.

CHART 101 Person-number forms of the anterior converb

	<i>bar-</i> ‘go’	<i>diē-</i> ‘say’
1SG	<i>bara:ppin</i>	<i>diēppin</i>
2SG	<i>bara:kkin</i>	<i>diēkkin</i>
3SG	<i>bara:tin</i>	<i>diētīn</i>
1PL	<i>bara:ppitīn</i>	<i>diēppitīn</i>
2PL	<i>bara:kkitīn</i>	<i>diēkkitīn</i>
3PL	<i>bara:ttarīn</i>	<i>diētterīn</i>

The anterior converb describes an event that precedes another event. In contrast to the sequential converb, the anterior converb is used if the two events are not regarded as a sequence but as two distinct events. Therefore, the anterior converb forms subordinate temporal clauses, which often can be translated with “(After) having ...” (see Section 9.3.3.1). The subjects of the main and subordinate clauses are mostly co-referential (292) since person-number marking at the anterior converb is rare. In the latter case, however, it is also possible that the subjects of both clauses are different (293).

- (292) *Hirga-ti-gar* *olor-o:t* *emīē*
sledge-POSS.3SG-DAT/LOC sit.down-CVB.ANT again
utuj-d-a.
fall.asleep-PST1-3SG
‘Having sat down onto the sledge, he fell asleep again.’
(AkEE_19XX_BoySister_flk.015)

- (293) *Karma:n-i-gar* *mö:čüg-ün* *ukt-a:t-in*,
 pocket-POSS.3SG-DAT/LOC ball-POSS.3SG.ACC put.in-CVB.ANT-3SG
a:n *ari-lin-n-a*.
 door open-MID-PST1-3SG
 ‘After he had put the ball into his pocket, a door opened.’
 (ErSV_1964_WarBirdsAnimals_flk.498)

As for the frequency of the anterior converb in the analyzed material, a short comment is in order here. Out of the 85 occurrences of the form, 44 come from transcripts of Nikolaj Anisimovič Popov, a Dolgan writer and novelist, originally from Volochanka. Moreover, only two out of the 85 instances are from speakers of the Lower Dolgan variety. So, the anterior converb seems to be preferably used by speakers of the Upper Dolgan variety and in the literary language.

According to Artem'ev (2013b: 185), the anterior converb can be negated with the suffix *-(I)m*, i.e. the suffix of the “negative anterior converb” being *-(I)mA:t*. However, this form does not occur at all in the analyzed material. Whether this is due to chance or whether the form is indeed absent from the natural speech of Dolgan cannot be finally answered and calls for further research.

6.3.2.5 Modal Converb

The modal converb is formed with the suffix *-BIččA*, which historically goes back to the combination of the postterminal past participle *-BIT* and the approximative case form **-(č)čA*. The latter is not productive anymore in Dolgan but is preserved in approximative numerals like *uōn-čA* ‘ten-APRX = approximately ten’ (see Section 3.4.5). Morphologically, the vowels of the suffix are subject to vowel harmony, and the suffix-initial consonant is subject to consonant assimilations. The initial consonant is *b* when the suffix is attached to vowel stems and consonant stems ending with a voiced non-nasal consonant; it is *p* when the suffix is attached to a consonant stem ending with a voiceless consonant; it is *m* when the suffix is attached to a consonant stem ending with a nasal consonant. Additionally, polysyllabic stems may exhibit metathesis, and the suffix-initial consonant is *b*. Chart 102 shows the allomorphs of the modal converb. In contrast to other converbal forms, the modal converb cannot be inflected with personal endings. Chart 103 shows the forms of the modal converb of a range of verbs.

The modal converb *-BIččA* describes an event that is a circumstance or a reason for another event. Given this, it forms subordinate adverbial clauses

CHART 102 Allomorphs of the modal converb

Preceding environment	Allomorphs
V, C _{+voice} , -nas	- <i>bičča</i> , - <i>bičče</i> , - <i>bučča</i> , - <i>büčče</i>
C _{-voice}	- <i>pičča</i> , - <i>pičče</i> , - <i>pučča</i> , - <i>püčče</i>
C _{+voice} , +nas	- <i>mičča</i> , - <i>mičče</i> , - <i>mučča</i> , - <i>müčče</i>

CHART 103 Modal converb

Verbal stem	Modal converb
<i>bar-</i> 'go'	<i>barbičča</i>
<i>kap-</i> 'catch'	<i>kappičča</i>
<i>ogus-</i> 'beat'	<i>oksubučča</i>
<i>utuj-</i> 'sleep'	<i>utujbučča</i>
<i>aha-</i> 'eat'	<i>aha:bičča</i>
<i>diē-</i> 'say'	<i>diēbičče</i>

(see Section 9.3.3). Since there is no person-number marking, the subjects in the main and the subordinate clauses are always co-referential.

- (294) [...], *ūōr-büčče* *ogonn'or hajar-bit*.
be.happy-CVB.MOD old.man say-PST2.3SG
 '["The people think falsely that the children are taken away to the boarding school forever"], the old man said, being happy'
 (PoNA_19900810_TripToVoloChanka_nar.101)

Finally, the modal converb is not used very frequently. In the analyzed material, only five instances could be found. As a functional alternative to the modal converb, also the simultaneous converb is used.

6.3.2.6 Purposive Converb

The purposive converb has the suffix -A:rl, which is subject to vowel harmony. Attaching it to consonant stems causes intervocalic voicing, the debuccalization *s > h* and vowel syncope in polysyllabic stems. When connected to vowel or diphthong stems, the suffix-initial vowel is deleted. Chart 104 shows the forms of the purposive converb.

CHART 104 Forms of the purposive
converb

Verbal stem	Purposive converb
<i>bar-</i> 'go'	<i>bara:ri</i>
<i>kap-</i> 'catch'	<i>kaba:ri</i>
<i>ogus-</i> 'beat'	<i>okso:ru</i>
<i>utuj-</i> 'sleep'	<i>utuja:ri</i>
<i>aha:-</i> 'eat'	<i>aha:ri</i>
<i>dîe-</i> 'say'	<i>dîeri</i>

The purposive converb is frequently inflected with personal endings, namely the personal endings from set 1 (predicative endings). Chart 105 shows the purposive converb with personal endings.

CHART 105 Purposive converb with
personal endings

	<i>bar-</i> 'go'	<i>dîe-</i> 'say'
1SG	<i>bara:ribin</i>	<i>dîeribin</i>
2SG	<i>bara:rigin</i>	<i>dîerigin</i>
3SG	<i>bara:ri</i>	<i>dîeri</i>
1PL	<i>bara:ribit</i>	<i>dîeribit</i>
2PL	<i>bara:rigit</i>	<i>dîerigit</i>
3PL	<i>bara:rilar</i>	<i>dîeriler</i>

The purposive converb -A:ri expresses the purpose for whose compliance an event happens. Thereby, it takes part in forming subordinate purpose clauses (see Section 9.3.3.3). The subjects of the matrix and subordinate clauses can principally be co-referential or not; the latter, however, is rare. If so, the usage of personal endings is obligatory to distinguish the subjects from each other.

- (295) *Li:pirdan emîe kihi-ni ölor-ö:rü hild'-ar.*
 Lyppyrdaan again **human-ACC** **kill-CVB.PURP** go-PRS.3SG
 'Lyppyrdaan is going again (in order) to kill people.'
 (ChuAE_1968_Lyppyrdaan_flk.023)

- (296) *D'îe-te:gi-ler-e* *itî-ge* *pastuk-tar*
 house-ADJZ-PL-POSS.3SG heat-DAT/LOC shepherd-PL
ket-i: *bar-a:ri-lar*
 guard-CVB.SIM go-CVB.PURP-3PL
haŋar-îâk *tus-ta:k-tar:* [...]
 say-PTCP.FUT fall.AUX-NEC-3PL
 'The inhabitants, for that the shepherds will go to guard in the heat,
 have to say: ["Well, when the heat comes, be careful and sleep"].'
 (KiMN_1975_ReindeerHerdng_nar.105)

The purposive converb can be negated with the suffix *-(I)m*, yielding the form *-(I)mA:rI*, like in example (297).

- (297) *Bütte* *öh-ü* *bul-al-lar* *î:t-im-a:ri*
 various word-ACC find-PRS-3PL send-NEG-CVB.PURP
ogo-lorun.
 child-POSS.3PL.ACC
 'They find various reasons [lit. words] for not sending their children.'
 (PoNA_19900810_TripToVoloChanka_nar.009)

When the purposive converb is combined with the verb *gin-* 'make', the construction gets a desiderative meaning (see Jark 2018).

- (298) *Ih-er-d-e:ri* *gin-al-lar,* *o-nu* *bu*
 drink-CAUS-CAUS-CVB.PURP make-PRS-3PL that-ACC this
"is-pep-pin" *d-î:r.*
 drink-NEG.PRS-1SG say-PRS.3SG
 'They want to make him drink, on that he says "I do not drink".'
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.130)

As for the negation of these desiderative constructions, it is interesting to note that not the verb *gin-* is negated, but the purposive converb.

- (299) *Ehigi* *gini-ni* *togo il-im-a:ri*
 2PL.PRO 3SG.PRO-ACC why take-NEG-CVB.PURP
gin-a-gît, [...].
 make-PRS-2PL
 'Why don't you want to take her [= the snow owl], [say it directly to her].'
 (PoNA_2004_SnowOwl_flk.032)

6.3.2.7 Negative Converb

The negative converb has the suffix $-(I)m(I)nA \sim -(I)mIn'A \sim -(I)mIjA$. As can be seen from the underspecified morpheme form, it is subject to vowel harmony, and the suffix itself is not stable since the middle consonant varies from *n* to *n'* to *j*. This variation is no feature exclusive for this form, cf., e.g. the oblique forms of personal pronouns, *minigi-n* \sim *min'igi-n* \sim *mijigi-n* '1SG.PRO-ACC' (see Section 5.1). As a tendency, $-(I)mIjA$ occurs in Upper Dolgan, whereas no dialectal or idiolectal distribution can be observed for the other variants. Four times, several variants can even be found in the speech of the same speaker. Furthermore, the first variant $-(I)m(I)nA$ can be shortened to $-(I)mnA$. When added to consonant stems, the suffix is $-Im(I)nA \sim -ImIn'A \sim -ImIjA$, causing intervocalic voicing, the debuccalization $s > h$ and vowel syncope. When connected to vowel stems, the suffix is $-m(I)nA \sim -mIn'A \sim -mIjA$. In contrast to other converbs, the negative converb cannot be inflected with personal endings. Chart 106 shows the forms of the negative converb.

The negative converb $-(I)m(I)nA \sim -(I)mIn'A \sim -(I)mIjA$ describes that an event has not taken place, whilst another event has. According to Artem'ev (2013b: 184), the named form is the negative counterpart of the sequential converb (see Section 6.3.2.1). This claim, however, cannot be supported, neither for formal nor for functional reasons: The kind of relation between the two events combined by the negative converb is quite variable; it does not necessarily have to be a sequence. As a case in point, example (301) contains the negative converb in a rather modifying function. Therefore, the negative converb cannot be analyzed as the direct functional counterpart to the sequential converb. It forms subordinate adverbial clauses, the subjects in the main and subordinate clauses being always co-referential since there is no person-number marking at the converb.

CHART 106 Forms of the negative converb

Verbal stem	Negative converb
<i>bar-</i> 'go'	<i>barim(i)na</i> \sim <i>barimin'a</i> \sim <i>barimija</i>
<i>kap-</i> 'catch'	<i>kabim(i)na</i> \sim <i>kabimin'a</i> \sim <i>kabimija</i>
<i>ogus-</i> 'beat'	<i>oksum(u)na</i> \sim <i>oksumun'a</i> \sim <i>oksumuja</i>
<i>utuj-</i> 'sleep'	<i>utujum(u)na</i> \sim <i>utujumun'a</i> \sim <i>utujumuja</i>
<i>aha-</i> 'eat'	<i>aha:m(i)na</i> \sim <i>aha:min'a</i> \sim <i>aha:mija</i>
<i>dîe-</i> 'say'	<i>dîem(i)ne</i> \sim <i>dîemin'e</i> \sim <i>dîemije</i>

- (300) *O-nu kör-ümne ere hiēb-i-ger*
 that-ACC see-NEG.CVB only pocket-POSS.3SG-DAT/LOC
ukt-an ke:h-er, d'aktar-a
 put.in-CVB.SEQ throw.AUX-PRS.3SG woman-POSS.3SG
et-er: [...].
 says-PRS.3SG
 'Not looking at it, he puts it into his pocket, his wife says: ["Well, now
 go away quickly, if my people see you here, they will not treat you well",
 she said].'
 (BaA_1930_FireInSmallTent_flk.034)
- (301) *Bu hild'-an huōl-un bul-umna ebeke*
 this go-CVB.SEQ way-POSS.3SG.ACC find-NEG.CVB bear
d'ie-ti-ger kel-bit.
 house-POSS.3SG-DAT/LOC come-PST2.3SG
 'She wandered around, and not finding the way she came to a bear's
 den.'
 (GoI_1930_WomanAndBear_flk.002)

In two examples, the negative converb appears to negate a postverbal construction.

- (302) "[...] *kanna kīs-kit bar-bit-in*
 where daughter-POSS.2PL go-PTCP.PST-POSS.3SG.ACC
bil-imne ka:l-īāk e-ti-gīt, [...].
 know-NEG.CVB stay.AUX-PTCP.FUT AUX-PST1-2PL
 "[You are apparently lucky [that] you have seen me], [otherwise] you
 would not know where your daughter has gone", he says.'
 (YaP_1930_GroomFromUpperWorld_flk.012)

If this pattern is not an exception but can be regularly be used to negate postverbal constructions, this would contradict the claim made by Däbritz (2019b: 128–129) that postverbal constructions cannot be negated in Dolgan (see Section 6.4.9 for details).

Finally, it has to be mentioned that the negative converb has widened its functions. Apart from forming subordinate clauses like described above, it can express the strong opinion of the speaker that an event really takes place. In example (303), the speaker is asked whether she remembers the time after she had retired from work, and she strongly confirms.

- (303) *Öjdö:-müne, berke öjd-ür-bün bûö.*
remember-NEG.CVB very remember-PRS-1SG EMPH
 ‘Of course, I do remember, I remember it very well.’
 (BeEI_KuNS_1998_Teacher_conv.BeEI.202)

The negative converb of the verb *bûöl-* ‘be; become’ has even almost lexicalized, often best translated as ‘of course’. In example (304), the speaker is asked to tell a tale that is different from the one told before. The speaker now emphasizes that she was not willing to tell the same tale once more, but indeed another one.

- (304) *Kaja, atin-na bûöl-umna.*
 well other-PART **be-NEG.CVB**
 ‘Well, another one, of course.’
 (UkET_AkEE_19940424_SongsTales_conv.UkET.114)

6.4 Tense-Aspect Forms

This section discusses the finite tense and aspect forms of the Dolgan verb. As typical for Turkic languages, both categories cannot be sharply distinguished from each other. Therefore, both tense and aspect are dealt with in this section.

The notion of *tense* is relatively undisputed in linguistic research, describing the grammatical expression of temporal reference, either to the moment of speech (yielding absolute tense forms) or to another point in time (yielding relative tense forms). The understanding and usage of the notion *aspect*, in turn, varies to a great extent. In this grammar, the theoretical approaches of Johanson (1971, 2000) are adopted, thus, understanding aspect as *viewpoint aspect*. Given that every event has three internal phases (beginning/first limit, course, end/second limit), the viewpoint aspect regards an event concerning its internal phases. The emerging aspect values are *intraterminal* (regarding the event within its limits) and *postterminal* (regarding the event after the transgression of its crucial limit). In other terminology, the intraterminal viewpoint aspect is referred to as *imperfective*, and the postterminal viewpoint aspect is referred to as *perfective*.

The crucial limit of an event is determined by the internal phase structure of the given verb: *non-transformative* verbs (e.g. *walk, live*) have no crucial limit, whereas *transformative* verbs have such (e.g. *go away, die*). In other terminology, non-transformative verbs are also called *atelic*, and transformative verbs are called *telic*. Transformative verbs can further be divided into *ini-*

tiotransformatives, whose crucial limit is the beginning of the corresponding event (*go away*), and *finitransformatives*, whose crucial limit is the end of the corresponding event (*die*). Prototypically, the intraterminal viewpoint aspect goes along with non-transformative verbs, whereas the postterminal viewpoint aspect corresponds to transformative verbs. However, as shown in the following sections, Dolgan exhibits many possibilities to account also for less prototypical combinations of the described parameters.

Coming to the formal inventory of tense-aspect forms in Dolgan, it can be said that it shows quite an elaborate tense-aspect system: There is one present tense, five past tenses, one future tense, and three forms (imperfect, habitual and abessive) underspecified for tense. Additionally, postverbal constructions can express aspectual distinctions as well as actionality. The named forms are discussed separately in the following sections but surely accompanied by necessary cross-references.

6.4.1 *Present Tense*

The present tense in Dolgan has two markers: -A ~ -I: in the first and second persons, and -Ar ~ -I:r in the third person. The third-person form traces back to the present participle (see Section 6.3.1.1). The first- and second-person forms are homonymous with the simultaneous converb forms (see Section 6.3.2.2). From a synchronic point of view, it cannot be decided whether the present tense marker -A ~ -I: is indeed a trace of the simultaneous converb suffix or a shortened form of the present participle suffix -Ar ~ -I:r. Still, regardless of the diachronic development, -A ~ -I: and -Ar ~ -I:r are present tense markers from a synchronic point of view.

When the suffix is connected to the verbal stem, the usual assimilation processes occur, i.e. intervocalic voicing, the debuccalization *s* > *h* and vowel syncope in polysyllabic stems. For person-number marking, the personal endings from set 1 (predicative endings; see Section 6.2) are added. In the third person plural, the present tense marker -Ar ~ -I:r is assimilated to -Al ~ -I:l. Chart 107 and Chart 108 show the affirmative paradigm of five verbs in the present tense.

CHART 107 Present tense affirmative—Consonant stems

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’
1SG	-A-bIn	<i>barabin</i>	<i>kababin</i>	<i>oksobun</i>
2SG	-A-gIn	<i>baragin</i>	<i>kabagin</i>	<i>oksogun</i>

CHART 107 Present tense affirmative—Consonant stems (*cont.*)

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'
3SG	-Ar	<i>barar</i>	<i>kabar</i>	<i>oksor</i>
1PL	-A-bIt	<i>barabit</i>	<i>kababit</i>	<i>oksobut</i>
2PL	-A-gIt	<i>baragit</i>	<i>kabagit</i>	<i>oksogut</i>
3PL	-Al-lAr	<i>barallar</i>	<i>kaballar</i>	<i>oksollar</i>

CHART 108 Present tense affirmative—Vowel stems

	Morpheme breaks	<i>aha:-</i> 'eat'	<i>dīe-</i> 'say'
1SG	-I:-bIn	<i>ahi:bin</i>	<i>dī:bin</i>
2SG	-I:-gIn	<i>ahi:gin</i>	<i>dī:gin</i>
3SG	-I:r	<i>ahi:r</i>	<i>dī:r</i>
1PL	-I:-bIt	<i>ahi:bit</i>	<i>dī:bit</i>
2PL	-I:-gIt	<i>ahi:git</i>	<i>dī:git</i>
3PL	-I:l-lAr	<i>ahi:llar</i>	<i>dī:ller</i>

The negation of the present tense is formed on the base of the negative present participle -BAT (see Section 6.3.1.2). Like in the affirmative paradigm, the personal endings from set 1 (predicative endings; see Section 6.2) are attached. When the suffix -BAT is attached to the verbal stem, the assimilation processes described in Section 6.3.1.2 apply. The attachment of the personal endings causes further assimilations in both suffixes. Chart 109 shows the negative paradigm of the present tense.

CHART 109 Present tense negative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dīe-</i> 'say'
1SG	-BAp-pIn	<i>barbappin</i>	<i>kappappin</i>	<i>oksubappin</i>	<i>dīebappin</i>
2SG	-BAk-kIn	<i>barbakkin</i>	<i>kappakkin</i>	<i>oksubakkin</i>	<i>dīebekkin</i>

CHART 109 Present tense negative (*cont.*)

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>diē-</i> ‘say’
3SG	-BA _t	<i>barbat</i>	<i>kappat</i>	<i>oksubat</i>	<i>diēbet</i>
1PL	-BA _p -pIt	<i>barbappit</i>	<i>kappappit</i>	<i>oksubappit</i>	<i>diēbeppit</i>
2PL	-BA _k -kIt	<i>barbakkIt</i>	<i>kappakkIt</i>	<i>oksubakkIt</i>	<i>diēbekkIt</i>
3PL	-BA _t -tAr	<i>barbattar</i>	<i>kappattar</i>	<i>oksubattar</i>	<i>diēbetter</i>

The present tense in Dolgan—both affirmative and negative—is used to describe events that are ongoing at the moment of speech or usually happen. In example (305), the speakers are describing a picture. In example (306), the fictive speaker is telling that they [= the other birds] do not take the snow owl along at the very moment of the speech.

- (305) *Ih-e* *olor-or,* *onton bu* *keps-īl-ler,* *gini*
 drink-CVB.SIM sit-PRS.3SG then this tell-PRS-3PL 3SG.PRO
kijjan-ar.
 get.angry-PRS.3SG
 ‘He is sitting and drinking, then they are telling, he is getting angry.’
 (ChGS_UoPP_20170724_SocCogOrder_conv.ChGS.050)

- (306) *Bihigi* *leŋkej* *bar-s-ar-in*
 1PL.PRO snow.owl go-COOP-PTCP.PRS-POSS.3SG.ACC
höbüle:-bep-pīt.
 agree-NEG.PRS-1PL
 ‘We do not agree that the snow owl comes along.’
 (ErSV_1964_SnowOwl_flk.028)

Rarely, the present tense can refer to the future when being combined with fitting adverbials like *harsin* ‘tomorrow’ or *kojut* ‘later’, like in example (307). Nevertheless, the future tense (see Section 6.4.3) is used more regularly in these contexts.

- (307) *Kös-pöp-püt,* *harsin* *ör-ü:-büť.*
 nomadize-NEG.PRS-1PL tomorrow stay-PRS-1PL
 ‘We will not nomadize, we will stay [here] tomorrow.’
 (PoKK_1964_TwoOrphanBoys_flk.084)

Besides expressing a concrete temporal reference to the moment of speech, the present tense describes regular events (308) or makes general statements without temporal reference (309).

- (308) *Kihin, hajin ilim-nen-er.*
 in.winter in.summer **net-VBZ-PRS.3SG**
 'In winter, in summer, he fishes with a net.'
 (AkEE_19900810_PearlBeard_flk.007)
- (309) *Hur-ka tüh-en-ner nöñüö kihi*
 temporary.camp-DAT/LOC fall-CVB.SEQ-3PL next human
ket-ir.
guard-PRS.3SG
 'When they reach the temporary camp, the next person guards [the reindeer].'
 (KiMN_1975_ReindeerHerding_nar.078)

Given these features, the present tense is clearly marked for the intraterminal viewpoint aspect. If the postterminal viewpoint aspect with present time reference shall be expressed, another coding has to be chosen, e.g. a postverbal construction with a transformative auxiliary verb (see Section 6.4.9). From an areal perspective, it should be mentioned that the present tense in Dolgan is an actual present tense and not an aorist like in the neighbouring Northern Samoyedic languages Nganasan and Enets (Wagner-Nagy 2019: 234–235; Siegl 2013b: 261–262) as well as in Ewenki (Menges 1943: 249–250). In contrast to these languages, the temporal interpretation of present tense forms in Dolgan does not depend on the internal phase structure of the verb; both non-transformative (310) and transformative (311) verbs get a present tense reading.

- (310) *Kerget-ter-bin gitta, in'e-bin gitta*
 family-PL-POSS.1SG.ACC with mother-POSS.1SG.ACC with
olor-o-bun ani, plem'an'isa-bin gitta.
live-PRS-1SG now niece-POSS.1SG.ACC with
 'I am living now with my family, with my mother, with my niece.'
 (KiLS_KiES_2009_Life_nar.KiLS.039)
- (311) *D'e ile öl-ö-bün ebit!*
 well indeed **die-PRS-1SG** EVID
 'Well, I am apparently dying indeed.'
 (PoS_PrG_1964_Kaamyylaak_flk.023)

Consequently, non-transformative verbs like *olor-* ‘live’ or *hirit-* ‘walk’ are much more frequent in the present tense than transformative verbs like *öl-* ‘die’ or *tüs-* ‘fall’. In any case, the combination of a transformative verb and present tense marking does not lead to an immediate past interpretation in Dolgan. In this case, rather the simple past (see Section 6.4.2.1) is used.

6.4.2 Past Tenses

All in all, there are five past tense forms in Dolgan. Three of them are synthetic (simple past, postterminal non-evidential past and postterminal evidential past), two of them are analytic (past progressive and pluperfect). The simple past is formed with the suffix *-TI* (see Section 6.4.2.1), and the postterminal past tenses are formed with the suffix *-BIT* differing only in the set of endings attached (see Sections 6.4.2.2 and 6.4.2.3). Given that the three tenses are formed by only two suffixes, the glosses *PST1* (simple past) and *PST2* (postterminal past tenses) are used. All past tenses have in common that they refer to a time before the moment of speech. The synthetic past tenses and the past progressive are absolute tenses, whereas the pluperfect is a relative tense. Furthermore, the functions of the three synthetic past tenses are not always easy to single out since both viewpoint aspect and evidentiality play a role in distinguishing them from each other.

As for viewpoint aspect, the simple past is unmarked, whereas the postterminal past tenses express postterminality, i.e. they regard an event after the transgression of its relevant limit. When the simple past is used to describe an event, the relevant limit of the latter may be transgressed or not. The speaker does not focus on expressing the viewpoint aspect. In example (312), the speaker tells about the 1930s. Consequently, the named people have arrived already a long time ago (and have gone away again), and the relevant, the final limit of the verb *kel-* ‘come’ is transgressed. In example (313), in turn, a mother talks to her children and tells them they should hide to be not found by the arriving Russian people. Therefore, the simple past is underspecified for the viewpoint aspect, and the emerging ambiguity is resolved via the context.

- (312) *Krasnaj_čumis-tar kel-li-ler bihiê-ke.*
 Red.Chumist-PL come-PST1-3PL 1PL.PRO-DAT/LOC
 ‘Red Chumists³ came to us.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.o8o)

3 The “Red Chum” was an organization of the Soviet regime which taught indigenous people during early Soviet time; the people working there were called “Red Chumists”.

- (313) *N'u:čča-lar kel-li-ler, kisten-ij, kisten-ij!*
 Russian-PL **come-PST1-3PL** hide-IMP.2PL hide-IMP.2PL
 'The Russians are coming, hide, hide!'
 (SuON_KuNS_19990303_HardLife_conv.SuON.025)

The postterminal past tenses, on the other hand, are clearly marked for view-point aspect, being postterminal items. This means that example (312) could also be expressed with these forms if the speaker wishes to express the event's postterminality. Example (313), on the other hand, could only be expressed with a postterminal past tense if the described event indeed transgressed its final limit (which is not the case in the given context). The following sentences, in turn, show events expressed with the postterminal non-evidential past (314) and with the postterminal evidential past (315). In either case, the forms are positively marked for postterminality.

- (314) *D'e min törö:-büt-üm Ava:m-ŋa.*
 well 1SG.PRO **be.born-PST2-1SG** Avam-DAT/LOC
 'Well, I was born in Ust'-Avam.'
 (PoPD_KuNS_2004_Life_conv.PoPD.001)
- (315) *Iti ügüs ogo-lo:k, ügüs ogo törö:-büt.*
 that many child-PROPR many child **be.born-PST2-3SG**
 '[They] have many children, many children were born.'
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.112)

Coming to evidentiality, i.e. the indication of the speaker's source of information, the simple past is unmarked again. It can be used for describing events that the speaker witnessed themselves, like in example (316). However, it can also be used together with particles expressing uncertainty, making it clear that the speaker did not witness the event themselves (317). Thus, the simple past is neutral concerning evidentiality since both first-hand and second-hand information can be coded.

- (316) *"Nohōk komuj-a kel-li-m", d-ir kine:s.*
 tax gather-CVB.SIM **come-PST1-1SG** say-PRS.3SG prince
 '“I came to collect taxes”, the prince says.'
 (SaSS_1964_NganasanBraveBoy_flk.044)

- (317) [...], *onno, bila, ehigi üle-gitin köllör-dü-ler*
 there apparently 2PL.PRO work-POSS.2PL.ACC show-PST1-3PL
eni.
 apparently
 ‘[A contest in the name of Boris Molchanov was organized], your work
 was probably shown there.’
 (AkNN_KuNS_200212_LifeHandicraft_conv.KuNS.026)

The same holds for the postterminal non-evidential past. In example (318), the speaker obviously witnessed that she worked at the fur farm. On the contrary, a form of the postterminal non-evidential past is combined with the particle *ühü* ‘they say’ in example (319), which expresses precisely that the speaker refers to second-hand information.

- (318) *Onno zv’eraf’erma-ga ülele:-bit-im.*
 there fur.farm-DAT/LOC work-PST2-1SG
 ‘There, I worked at the fur farm.’
 (PoPD_KuNS_2004_Life_conv.PoPD.044)
- (319) *Ol ihin öl-üm-e:ri kubuluj-but-a ühü.*
 that because.of die-NEG-CVB.PURP turn.into-PST2-3SG they.say
 ‘Therefore, to not die, he turned into [a worm], it is said.’
 (BaA_1930_OldManOldWoman_flk.057)

The postterminal evidential past, in turn, expresses evidentiality, often focusing on the result of some event. In example (320), the speaker sees a picture of a man having his head on his knees. The speaker, thus, did not witness herself that the man had dropped his head onto his knees but concludes it from the fact that the head is now on his knees. Hence, the item is positively marked for evidentiality.

- (320) *Men’i:-tin tobuk-tar-i-gar*
 head-POSS.3SG.ACC knee-PL-POSS.3SG-DAT/LOC
tüh-er-bit.
 fall-CAUS-PST2-3SG
 ‘Apparently, he has dropped his head onto his knees.’
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.091)

As a result, the simple past and the postterminal non-evidential past are unmarked for the category of evidentiality. They are usually used in non-eviden-

tial contexts but can also be combined with other elements, mainly particles, which express evidentiality. The postterminal evidential past, in turn, is marked for evidentiality, communicating second-hand information, often via inference, more seldom also via hearsay (see Section 6.6 for details).

Combining the parameters of evidentiality and viewpoint aspect, the three synthetic past tenses in Dolgan can sufficiently be distinguished from each other. Chart 110 sums this up in a schematic form.

CHART 110 Differentiating features of synthetic past tenses

	Viewpoint aspect	Evidentiality
simple past	–	–
postterminal	+	–
non-evidential past	(postterminal)	
postterminal	+	+
evidential past	(postterminal)	(second-hand information)

Although the grammar at hand is undoubtedly no comparative grammar of the Turkic languages, some ranging in comments shall be made. Dolgan and Sakha share the observed interplay of tense, viewpoint aspect and evidentiality; see Buder (1989) for a concise description of the tense-aspect system of Sakha. From a broader turcological point of view, however, Dolgan (as well as Sakha) exhibits clear divergences. It immediately sparks the eye that there are three instead of two synthetic past tenses, which probably made the system prone to functional shifts. The simple past underspecified for viewpoint aspect in Dolgan has apparent cognates in most Turkic languages (Johanson 2021: Ch. 35). In contrast, the split of the postterminal past into one form marked for evidentiality and one form unmarked for evidentiality is a Dolgan (and Sakha) peculiarity. Given that many surrounding languages have elaborate systems of expressing evidentiality, this might be a substrate influence. However, further research is needed to prove this hypothesis.

After these introductory paragraphs have dealt with the discrimination of the past tenses against each other, the latter are discussed separately in what follows, also providing the necessary paradigms and formal explanations.

6.4.2.1 Simple Past

The simple past in Dolgan has the marker -TI with altogether 16 allomorphs. The vowel of the suffix is subject to vowel harmony, and the suffix-initial consonant exhibits assimilations. It is *t* when added to vowel stems and consonant stems that end with a voiceless consonant. It is *d* when added to consonant stems that end with a voiced non-nasal, non-lateral consonant. It is *n* when added to consonant stems that end with a nasal consonant. Finally, it is *l* when it is added to consonant stems that end with *l*. As against many other inflectional suffixes, -TI does not cause metathesis in polysyllabic verb stems. Chart 111 summarizes the allomorphs of the simple past tense marker.

CHART 111 Allomorphs of the simple past tense marker

Preceding environment	Allomorphs
V, C _{-voice}	- <i>tī</i> , - <i>tī</i> , - <i>tu</i> , - <i>tü</i>
C _{+voice} , -nas, -lat	- <i>dī</i> , - <i>dī</i> , - <i>du</i> , - <i>dü</i>
C _{+voice} , +nas	- <i>nī</i> , - <i>nī</i> , - <i>nu</i> , - <i>nü</i>
C _{+voice} , +lat	- <i>lī</i> , - <i>lī</i> , - <i>lu</i> , - <i>lū</i>

The person-number endings in the simple past come from set 2 (possessive endings) except the third person plural, where the form -LAr from set 1 (predicative endings) is used. In the third person singular, the past tense marker -TI and the person-number ending -(t)A have amalgamated, yielding the suffix -TA. Synchronically, it could, thus, be said that there is a zero ending in the third person singular. Diachronically, however, the person-number ending -TA has to be set; otherwise, it could not be explained why the form ends with a low vowel. Chart 112 shows the affirmative paradigm of four verbs in the simple past.

The simple past is negated with the suffix -BA, inserted between the verbal stem and the tense suffix. It behaves morphonologically like the negative present participle -BAT (see Section 6.3.1.2) and thus causes the same assimilation processes, including metathesis in polysyllabic verb stems. Siegl (2020: 237–238) proposes to analyze the negated simple past tense forms as a combination of the negative present participle -BAT and the personal endings from set 2 (possessive endings). Admittedly, this analysis is not far to seek at first glance.

However, it causes several problems: First, the first- and the second-person plural suffixes are -BI_t and -GI_t, respectively, not -(I)bI_t and -(I)gI_t (see Section 6.2). Consequently, it could not be explained why the correlating forms are -BA-tI-bI_t and -BA-tI-gI_t, respectively, and not *-BAp-pI_t and *-BAk-kI_t. This can additionally be proven by the possessive forms of the negative present participle, as well as the negative present tense forms, which precisely show -BAp-pI_t and -BAk-kI_t (see Sections 6.3.1.2 and 6.4.1). Second, the negative present participle -BA_T is an intraterminal item, whereas the simple past tense is underspecified for the viewpoint aspect. Third, and closely connected to this, the combination of the negative present participle -BA_T and the personal endings from set 2 yields intraterminal negated imperfect forms (see Section 6.4.4), which is functionally expected. Although homonymy and re-interpretation are widespread in Dolgan verbal morphology, it is more felicitous to analyze the negated simple past tense forms as a combination of the negative suffix -BA—which is attested at other places in verbal inflection as well—and the simple past tense marker -TI. Chart 113 shows the negative paradigm of four verbs in the simple past.

CHART 112 Simple past affirmative

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>diē-</i> ‘say’
1SG	-TI-m	<i>bardim</i>	<i>kaptim</i>	<i>ogustum</i>	<i>diētim</i>
2SG	-TI-ŋ	<i>bardiŋ</i>	<i>kaptiŋ</i>	<i>ogustuŋ</i>	<i>diētiŋ</i>
3SG	-T-A	<i>barda</i>	<i>kapta</i>	<i>ogusta</i>	<i>diēte</i>
1PL	-TI-bI _t	<i>bardibit</i>	<i>kaptibit</i>	<i>ogustubut</i>	<i>diētibit</i>
2PL	-TI-gI _t	<i>bardiḡit</i>	<i>kaptiḡit</i>	<i>ogustugut</i>	<i>diētiḡit</i>
3PL	-TI-lAr	<i>bardi_lAr</i>	<i>kapti_lAr</i>	<i>ogustular</i>	<i>diētiler</i>

CHART 113 Simple past negative

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>diē-</i> ‘say’
1SG	-BA-tI-m	<i>barbatim</i>	<i>kappatim</i>	<i>oksubatim</i>	<i>diēbetim</i>
2SG	-BA-tI-ŋ	<i>barbatiŋ</i>	<i>kappatiŋ</i>	<i>oksubatiŋ</i>	<i>diēbetiŋ</i>
3SG	-BA-t-A	<i>barbata</i>	<i>kappata</i>	<i>oksubata</i>	<i>diēbete</i>
1PL	-BA-tI-bI _t	<i>barbatibit</i>	<i>kappatibit</i>	<i>oksubatibit</i>	<i>diēbetibit</i>

CHART 113 Simple past negative (*cont.*)

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
2PL	-BA-tI-gIt	<i>barbatigit</i>	<i>kappatigit</i>	<i>oksubatigit</i>	<i>dîebetigit</i>
3PL	-BA-tI-lAr	<i>barbatilar</i>	<i>kappatilar</i>	<i>oksubatilar</i>	<i>dîebetiler</i>

As for the category of tense, the simple past describes events that happened before the moment of speech. In example (321), the speaker talks about the Second World War and fighting at the front. Hence, he refers to the past.

- (321) *D'e, onton tûs-tû-m bugurduk.*
well then fall-PST1-1SG like.this
'Well, then I fell like this.'
(ChVD_AkEE_198204_SoldierInWar_nar.ChVD.102)

The simple past is unmarked for the categories of aspect and evidentiality (see Section 6.4.2 above). Not expressing an aspectual value, especially not expressing postterminality, events expressed with the simple past may have the connotation of still going on or having just happened. This is probably why Artem'ev (2013b: 202) calls this tense *nedavno prošedšee vremja* 'recently passed past tense' and claims that it would describe events that have happened immediately before the moment of speech. Example (322) shows that this impression is merely a side-effect of the unmarkedness for viewpoint aspect. Only from the context, but not from the tense form itself, it can be concluded that the reindeer in question are dead now. Therefore, it seems like they have just been killed. This reading is undoubtedly logically correct, but apparently not what the speaker wants to express regarding tense and aspect. In contrast, the speaker does not need to express this via viewpoint aspect because it is already clear from the context. The same holds in example (323): Here, the interviewer speaks to her guest and observes that he has brought some old tapes. Undoubtedly, the final limit of the verb *egel-* 'bring' is transgressed since the recordings are there, but the speaker does not have to mark this linguistically because they are there.

- (322) *Ûs ki:l-i ölör-dü-m – hiê-ŋ!*
three wild.reindeer-ACC kill-PST1-1SG eat-IMP.2PL
'I killed three wild reindeer, eat!'
(PoKK_1964_TwoOrphanBoys_flk.186)

- (323) *Urukku kas's'eta-lar-i egeł-li-git, [...].*
 former cassette-PL-ACC **bring-PST1-2PL**
 'You have brought old cassettes, [so that the people get to know them
 when they listen to the radio].'
 (ElBK_KuNS_2004_Storytellers_conv.KuNS.001)

Finally, some notes on the copula and auxiliary verb *e-* 'be' are in order since it differs in form and function from the lexical verbs described above. Formally, Stapert (2013: 195–198) notes that the third-person plural form of the verb *e-* has the ending *-LARa* instead of *-LAR* in the simple past. Since the former comes from set 2 of the personal endings like in the other persons, this can be seen as an instance of paradigm regularization. In the analyzed material, five-sixths of third-person plural forms of *e-* (250 out of 302 cases) have indeed the form *etilere* instead of *etiler*, regardless of whether used as a copula (324) or auxiliary (325) verb. Taking a broader perspective, this is a clear difference between Dolgan and Sakha since the latter uses primarily the form *etiler* in such contexts (Stapert 2013: 197).

- (324) *Pač-čit-tar e-ti-lere.*
 deadfall-AGN-PL **be-PST1-3PL**
 'They were trappers.'
 (KiLS_KiES_2009_Life_nar.KiLS.005)
- (325) *A d'ie-ler ke tut-ullu-but e-ti-lere?*
 and house-PL PTCL build-PASS-PTCP.PST **AUX-PST1-3PL**
 'And houses had been built then?'
 (SuON_KuNS_19990303_HardLife_conv.KuNS.035)

As for the copula verb *e-*, the simple past is the form most frequently used in non-verbal predications referring to the past (see Section 8.2). Example (326) shows a locative clause (see Section 8.2.3), example (327) shows a possessive clause (see Section 8.2.4).

- (326) [...] *min buō oččogo onno Xarijala:k-ka e-ti-m.*
 1SG.PRO PTCL then there Khariyalaak-DAT/LOC **be-PST1-1SG**
 '[The Olenyok district, it is an island], I was there in Khariyalaak at that
 time.'
 (ZhNA_KuNS_20xx_LifeAndMusic_conv.ZhNA.048)

- (327) *A:ku-lɑ:k* *e-ti-bit.*
tamed.reindeer-PROPR **be-PST1-1PL**
'We had a tamed reindeer.'
(PoTY₂₀₀₉ *Aku_nar.010*)

6.4.2.2 Postterminal non-Evidential Past

The postterminal non-evidential past is based on the postterminal past participle -BIT. Its morphonological behaviour, when being attached to verbal stems, is described in detail in Section 6.3.1.3, whence it is not repeated here. To the postterminal past participle -BIT, the personal endings from set 2 (possessive endings; see Section 6.2) are attached. In the singular persons, their vowel-initial suffixes appear, i.e. -Im (1SG), -Iŋ (2SG) and -A (3SG), respectively. In the plural persons, the final consonant of -BIT undergoes regressive assimilation (see Section 2.5.3). Chart 114 shows the affirmative paradigm of four verbs in the postterminal non-evidential past.

CHART 114 Postterminal non-evidential past affirmative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dīe-</i> 'say'
1SG	-BIt-Im	<i>barbitim</i>	<i>kappitim</i>	<i>oksubutum</i>	<i>dīēbitim</i>
2SG	-BIt-Iŋ	<i>barbitiŋ</i>	<i>kappitiŋ</i>	<i>oksubutuŋ</i>	<i>dīēbitiŋ</i>
3SG	-BIt-A	<i>barbita</i>	<i>kappita</i>	<i>oksubuta</i>	<i>dīēbite</i>
1PL	-BIp-pIt	<i>barbippit</i>	<i>kappippit</i>	<i>oksubupput</i>	<i>dīēbippit</i>
2PL	-BIk-kIt	<i>barbikkit</i>	<i>kappikkit</i>	<i>oksubukkut</i>	<i>dīēbikkit</i>
3PL	-BIt-tArA	<i>barbittara</i>	<i>kappittara</i>	<i>oksubuttara</i>	<i>dīēbittere</i>

Additionally, the postterminal non-evidential past exhibits contracted forms in the case of stems ending with *l* or *r*. The contraction is never obligatory and occurs most often in spontaneous speech. Expectedly, it applies to frequent verbs such as *bar-* 'go', *bīer-* 'give' or *kel-* 'come', and also to the copula verb *būōl-*. Chart 115 shows the contracted non-evidential past tense forms of *bar-* 'go', *kel-* 'come' and *būōl-* 'be; become'.

The negation of the postterminal non-evidential past is formed by the negative postterminal past participle -BA_tAK (see Section 6.3.1.4), which in turn is a combination of the negative suffix -BA and the conditional participle -TAK. Like in the affirmative paradigm, the personal endings from set 2 (possessive endings; see Section 6.2) are attached. The morphonological processes that

CHART 115 Contracted forms of the non-evidential postterminal past

	<i>bar-</i> 'go'	<i>kel-</i> 'come'	<i>buōl-</i> 'be; become'
1SG	<i>bartim</i>	<i>keltim</i>	<i>buōltum</i>
2SG	<i>bartiŋ</i>	<i>keltiŋ</i>	<i>buōltuŋ</i>
3SG	<i>barta</i>	<i>kelte</i>	<i>buōlta</i>
1PL	<i>bartibit</i>	<i>keltibit</i>	<i>buōltubut</i>
2PL	<i>bartigit</i>	<i>keltigit</i>	<i>buōltugut</i>
3PL	<i>bartara</i>	<i>keltere</i>	<i>buōltara</i>

CHART 116 Postterminal non-evidential past negative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	-BAAtAg-Im	<i>barbatagim</i>	<i>kappatagim</i>	<i>oksubatagim</i>	<i>diēbetegim</i>
2SG	-BAAtAg-Iŋ	<i>barbatagiŋ</i>	<i>kappatagiŋ</i>	<i>oksubatagiŋ</i>	<i>diēbetegiŋ</i>
3SG	-BAAtAg-A	<i>barbataga</i>	<i>kappataga</i>	<i>oksubataga</i>	<i>diēbetege</i>
1PL	-BAAtAk-pIt	<i>barbatakpit</i>	<i>kappatakpit</i>	<i>oksubatakpit</i>	<i>diēbetekpit</i>
2PL	-BAAtAk-kIt	<i>barbatakkit</i>	<i>kappatakkit</i>	<i>oksubatakkit</i>	<i>diēbetekkit</i>
3PL	-BAAtAk-tArA	<i>barbataktara</i>	<i>kappataktara</i>	<i>oksubataktara</i>	<i>diēbetektere</i>

occur are entirely the same as in the case of the participle. Additionally, the final consonant of -BAAtAk is voiced in the singular persons. Chart 116 shows the negative paradigm of four verbs in the postterminal non-evidential past. In contrast to the affirmative forms discussed above, the negative postterminal non-evidential past does not appear to exhibit contracted forms according to the material analyzed here.

The postterminal non-evidential past always refers to events that have happened before the moment of speech. In contrast to the simple past, it is marked for the category of viewpoint aspect, being a postterminal item. Such being the case, the events in question are described from the perspective after the transgression of their relevant limit. Therefore, one often gets the impression that events described with the postterminal non-evidential past already happened a long time ago, which may have led Artem'ev (2013b: 202) to call this tense *preždeprošedšee vremja* 'earlier passed past tense'. Nevertheless, this impression is rather a side-effect of the viewpoint aspect, which the form actually

expresses. In example (328), the speaker tells an episode of playing with a friend. Here, it is linguistically expressed that the relevant limit of the verb *ubaj-* ‘flame up; to burn’ is transgressed, namely the initial limit. In contrast to a similar example with the simple past, this gives the impression that the incident happened some time ago. Apparently, this fits well with episodes told afterwards by a speaker.

- (328) *Kim e-t-e=j, e:, k'erasin-i, onton hiraj-im*
 who be-PST1-3SG=Q eh kerosine-ACC then face-POSS.1SG
ubaj-bit-a.
 flame.up-PST2-3SG
 ‘What was it, eh, kerosine, then my face burnt.’
 (KuDP_2009_Fire_nar.008)

A short comment on non-transformative verbs is in order here. In contrast to verbs like *öl-* ‘die’ or *ubaj-* ‘flame up; burn’, verbs like *ülele-* ‘work’ or *olor-* ‘live’ have no crucial limit that would need to be transgressed to have the action completed (see Johanson 2000: 58 ff.). In the case of non-transformative verbs, the postterminal non-evidential past describes respective events mostly after they have ended, cf. example (329). From the context, it becomes clear that the speaker worked in Ust'-Avam already several decades ago.

- (329) *Er-ge taks-an bara:n Ava:m-ŋa ikki*
 husband-DAT/LOC go.out-CVB.SEQ after Avam-DAT/LOC two
d'il-i ülele-bit-im.
 year-ACC work-PST2-1SG
 ‘After having married, I worked for two years in Ust'-Avam.’
 (BeEI_KuNS_1998_Teacher_conv.BeEI.015)

As for the category of evidentiality, the examples clearly show that the postterminal non-evidential past is not marked for evidentiality: In both sentences, the speakers have witnessed the event themselves since they were personally involved.

6.4.2.3 Postterminal Evidential Past

The postterminal evidential past in Dolgan—like the postterminal non-evidential past—is formed based on the postterminal past participle -BIT (see Section 6.3.1.3). When the suffix is attached to a verbal stem, the morphonological processes that occur are thus the same. The only difference between these two past tenses is the set of personal endings (see Section 6.2) used: Whereas in

CHART 117 Postterminal evidential past affirmative

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>diē-</i> ‘say’
1SG	-Blp-pIn	<i>barbippin</i>	<i>kappippin</i>	<i>oksubuppun</i>	<i>diēbippin</i>
2SG	-Blk-kIn	<i>barbikkin</i>	<i>kappikkin</i>	<i>oksubukkun</i>	<i>diēbikkin</i>
3SG	-Blt	<i>barbit</i>	<i>kappit</i>	<i>oksubut</i>	<i>diēbit</i>
1PL	-Blp-pIt	<i>barbippit</i>	<i>kappippit</i>	<i>oksubupput</i>	<i>diēbippit</i>
2PL	-Blk-kIt	<i>barbikkIt</i>	<i>kappikkIt</i>	<i>oksubukkut</i>	<i>diēbikkIt</i>
3PL	-Blt-tAr	<i>barbittar</i>	<i>kappittar</i>	<i>oksubuttar</i>	<i>diēbitter</i>

the postterminal non-evidential past, the endings from set 2 (possessive endings) are used, in the postterminal evidential past, it is the endings from set 1 (predicative endings). Since the endings of both sets are homonymous in the first and second person plural, these forms are homonymous in the postterminal past tenses, too. Chart 117 shows the affirmative paradigm of four verbs in the postterminal evidential past. In the third person plural, contracted forms may occur in the case of stems ending with *l* or *r*, e.g. *kel-t-er* ‘come-PST2-3PL’ and *bar-t-ar* ‘go-PST2-3PL’. Like in the case of the contracted postterminal non-evidential past forms (see Section 6.4.2.2), this variation is always free and not morphosyntactically constrained.

The negation of the postterminal evidential past is formed based on the negative postterminal past participle -BA_tAK (see Section 6.3.1.4). Like in the affirmative paradigm, only the choice of the set of endings (see Section 6.2) distinguishes the postterminal evidential past (set 1) from the postterminal non-evidential past (set 2). Once more, the first- and second-person plural forms are homonymous. Chart 118 shows the negative paradigm of four verbs in the postterminal evidential past. The negative forms of the copula verb *būōl-* ‘be; become’ exhibit full and contracted variants: *būōlbatakpin* ~ *būōltakpin* (1SG), *būōlbatakkin* ~ *būōltakkin* (2SG), *būōlbatak* ~ *būōltak* (3SG), *būōlbatakpit* ~ *būōltakpit* (1PL), *būōlbatakkit* ~ *būōltakkit* (2PL), *būōlbaktar* ~ *būōltaktar* (3PL). The observed variation can probably be explained by the high frequency of the forms since they occur in negated predicate nominals and adjectives (see Section 8.5.1.2).

The postterminal evidential past—like the postterminal non-evidential past and unlike the simple past—is a postterminal item, i.e. an item describing events after the transgression of their relevant limits. In example (330), the speaker tells a story that is apparently over. Thus, he envisages the event after its

CHART 118 Postterminal evidential past negative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	-BAAtAk-pIn	<i>barbatakpin</i>	<i>kappatakpin</i>	<i>oksubatakpin</i>	<i>diēbetekpin</i>
2SG	-BAAtAk-kIn	<i>barbatakkIn</i>	<i>kappatakkIn</i>	<i>oksubatakkIn</i>	<i>diēbetekkin</i>
3SG	-BAAtAk	<i>barbatak</i>	<i>kappatak</i>	<i>oksubatak</i>	<i>diēbetek</i>
1PL	-BAAtAk-pIt	<i>barbatakpit</i>	<i>kappatakpit</i>	<i>oksubatakpit</i>	<i>diēbetekpit</i>
2PL	-BAAtAk-kIt	<i>barbatakkIt</i>	<i>kappatakkIt</i>	<i>oksubatakkIt</i>	<i>diēbetekkit</i>
3PL	-BAAtAk-tAr	<i>barbataktar</i>	<i>kappataktar</i>	<i>oksubataktar</i>	<i>diēbetekter</i>

crucial limit, namely the initial limit, which means that the woman had gotten sick and was sick at the relevant point of the story.

- (330) *Bu tayn-a tur-dag-ina emiē iāld'i-bit*
 this dress-CVB.SIM stand.AUX-TEMP-3SG again get.sick-PST2.3SG
d'aktar-a.
 woman-POSS.3SG
 'When he was dressing [himself], his wife got sick again.'
 (MiAI_1964_OldPeasantOldWoman_flk.031)

However, in contrast to the other past tenses, the postterminal evidential past is marked positively for evidentiality. The latter is not specified further; thus, the speaker expresses that they themselves got to know about the relevant event via some secondary channel, may it be hearsay or any kind of inference. Therefore, the postterminal evidential past is often used in telling fictive stories like in example (330) above; given the fictiveness of the story, the speaker certainly has not witnessed the described event themselves. In example (331), the speaker tells about the settlement *Levinskie Peski*, where she had lived earlier, but where she is now not going anymore. Therefore, she knows from other people, from the news or anywhere else, that only a few people stayed after the last flood in the settlement—to code this type of knowledge, the speaker uses the postterminal evidential past. In example (332), this becomes even clearer: Here, the speaker describes a picture of a boy. The boy was already seen in a picture described before, but in the recent picture, the boy is bigger. The speaker thus infers that the boy must have grown.

- (331) [...] *ani saps'em agijak kihi ka:l-bit.*
 now at.all few human stay-PST2.3SG
 '[Life has changed, in the recent flood all houses, all people went away],
 now there stayed very few people at all.'
 (PoPD_KuNS_2004_Life_conv.PoPD.129)
- (332) *Ogo-to ula:p-pit buō.*
 child-POSS.3SG grow-PST2.3SG EMPH
 'The child has grown apparently.'
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.162)

As becomes clear from these examples, the coding of evidentiality often conveys a connotation of resultativity. This is especially true in cases where the speaker infers from the circumstances that an event must have taken place, like in example (332). Therefore, the postterminal evidential past is probably called *prošedšee rezul'tativnoe vremja* and *resultative past*, respectively, in existing grammatical descriptions (Li 2011: 135; Artem'ev 2013b: 203).

In addition to the evidential function of the postterminal evidential past itself, the third-person singular form of the copula/auxiliary verb *e-* has been grammaticalized into an evidential particle, yielding the form *ebit* or even shortened *et*.

- (333) *E: Tat'jana kimie-ke Ivanovna-ga keipse:bip-pin*
 eh Tatyana who.PH-DAT/LOC Ivanovna-DAT/LOC tell-PST2-1SG
ebit.
EVID
 'Eh, I told it to Tatyana, whatchamacallit, Ivanovna, apparently.'
 (PoIP_ErAI_2009_Life2_nar.PoIP.026)
- (334) *Ani muōra atin, ularij-bit et.*
 now tundra different change-PST2.3SG **EVID**
 'Now the tundra is different, it has changed apparently.'
 (AsKS_19XX_Amulet_nar.298)

As can be seen from the examples, the form *ebit* ~ *et* can be combined with finite verb forms. The exact domains and functions of this particle are described in Section 6.6, devoted to evidentiality.

6.4.2.4 Pluperfect

The pluperfect is one of the two analytically formed past tenses in Dolgan. It is formed with the postterminal past participle -BIT (see Section 6.3.1.3) and the simple past forms of the auxiliary verb *e-*. Note that in the third person plural—except for one single instance—the form *etilere* of the auxiliary *e-* is exclusively used (see also comments on the auxiliary *e-* in Section 6.4.2.1). Chart 119 shows the affirmative paradigm of the pluperfect of four verbs in Dolgan.

CHART 119 Pluperfect affirmative

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
1SG	<i>barbit etim</i>	<i>kappit etim</i>	<i>oksubut etim</i>	<i>dîebit etim</i>
2SG	<i>barbit etiŋ</i>	<i>kappit etiŋ</i>	<i>oksubut etiŋ</i>	<i>dîebit etiŋ</i>
3SG	<i>barbit ete</i>	<i>kappit ete</i>	<i>oksubut ete</i>	<i>dîebit ete</i>
1PL	<i>barbit etibit</i>	<i>kappit etibit</i>	<i>oksubut etibit</i>	<i>dîebit etibit</i>
2PL	<i>barbit etigit</i>	<i>kappit etigit</i>	<i>oksubut etigit</i>	<i>dîebit etigit</i>
3PL	<i>barbit etilere</i>	<i>kappit etilere</i>	<i>oksubut etilere</i>	<i>dîebit etilere</i>

CHART 120 Pluperfect negative

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
1SG	<i>barbatak etim</i>	<i>kappatak etim</i>	<i>oksubatak etim</i>	<i>dîebetek etim</i>
2SG	<i>barbatak etiŋ</i>	<i>kappatak etiŋ</i>	<i>oksubatak etiŋ</i>	<i>dîebetek etiŋ</i>
3SG	<i>barbatak ete</i>	<i>kappatak ete</i>	<i>oksubatak ete</i>	<i>dîebetek ete</i>
1PL	<i>barbatak etibit</i>	<i>kappatak etibit</i>	<i>oksubatak etibit</i>	<i>dîebetek etibit</i>
2PL	<i>barbatak etigit</i>	<i>kappatak etigit</i>	<i>oksubatak etigit</i>	<i>dîebetek etigit</i>
3PL	<i>barbatak etilere</i>	<i>kappatak etilere</i>	<i>oksubatak etilere</i>	<i>dîebetek etilere</i>

The negative pluperfect is formed with the negative postterminal past participle -BATAK (see Section 6.3.1.4) and the simple past forms of the auxiliary verb *e-*. Chart 120 shows the negative paradigm of the pluperfect of four verbs in Dolgan.

The pluperfect is a relative tense, describing that an event had taken place before another event took place. Given this, the pluperfect is a postterminal item. In example (335), the speaker tells about an episode from the past when

she went to a place in the tundra where she and a friend had put a wooden figure that looked like a hare.

- (335) [...] *ol zajčik i:k-t-illi-bit e-t-e*
 that hare.DIM.R urine-VBZ-PASS-PTCP.PST AUX-PST1-3SG
i:k-te:k e-t-e.
 urine-PROPR be-PST1-3SG
 ‘[At the place there was the same hare], that hare had been peed on, it was full of urine.’
 (KuDP_2009_Hare_nar.019)

The negated pluperfect is used very rarely. On the one hand, this is due to the low frequency of respective situations in general. However, on the other hand, also the past abessive based on the abessive participle -A *ilik* ~ -I: *ilik* ~ -Alik ~ -I:lik can be used in similar contexts (see Section 6.4.8). Example (336) is one of the rare occurrences of the negated pluperfect in the analyzed material.

- (336) *Dalga:t-tar-ga kü:l-ü: bûl-batak*
 Dolgan-PL-DAT/LOC laugh-ACTN be-NEG.PTCP.PST
e-t-e, [...].
 AUX-PST1-3SG
 ‘[A.A. Popov writes that] there had not been laughter among the Dolgans.’
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.097)

6.4.2.5 Past Progressive

The past progressive is an analytic tense-aspect form based on the present participle -Ar ~ -I:r (see Section 6.3.1.1) and the simple past forms of the auxiliary verb *e-*. In contrast to the pluperfect, more variation of the auxiliary form *etiler* ~ *etilere* can be observed in the third person plural, though the latter form is also more frequent here (see also comments on the auxiliary *e-* in Section 6.4.2.1). Chart 121 shows the affirmative paradigm of the past progressive.

The negative past progressive is formed with the negative present participle -BAT (see Section 6.3.1.2) and the simple past forms of the auxiliary verb *e-*. As for the third-person plural forms of the auxiliary, it also holds in the negative paradigm that the form *etilere* is more frequent than *etiler*, but the latter does occur, too. Chart 122 shows the negative paradigm of the past progressive.

The past progressive expresses an ongoing, long-lasting event in the past. The event may have ended or not, but the speaker’s focus using this tense lies on

CHART 121 Past progressive affirmative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dîe-</i> 'say'
1SG	<i>barar etim</i>	<i>kabar etim</i>	<i>oksor etim</i>	<i>dî:r etim</i>
2SG	<i>barar etiñ</i>	<i>kabar etiñ</i>	<i>oksor etiñ</i>	<i>dî:r etiñ</i>
3SG	<i>barar ete</i>	<i>kabar ete</i>	<i>oksor ete</i>	<i>dî:r ete</i>
1PL	<i>barar etibit</i>	<i>kabar etibit</i>	<i>oksor etibit</i>	<i>dî:r etibit</i>
2PL	<i>barar etigit</i>	<i>kabar etigit</i>	<i>oksor etigit</i>	<i>dî:r etigit</i>
3PL	<i>barar etilere</i>	<i>kabar etilere</i>	<i>oksor etilere</i>	<i>dî:r etilere</i>

CHART 122 Past progressive negative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dîe-</i> 'say'
1SG	<i>barbat etim</i>	<i>kappat etim</i>	<i>oksubat etim</i>	<i>dîebet etim</i>
2SG	<i>barbat etiñ</i>	<i>kappat etiñ</i>	<i>oksubat etiñ</i>	<i>dîebet etiñ</i>
3SG	<i>barbat ete</i>	<i>kappat ete</i>	<i>oksubat ete</i>	<i>dîebet ete</i>
1PL	<i>barbat etibit</i>	<i>kappat etibit</i>	<i>oksubat etibit</i>	<i>dîebet etibit</i>
2PL	<i>barbat etigit</i>	<i>kappat etigit</i>	<i>oksubat etigit</i>	<i>dîebet etigit</i>
3PL	<i>barbat etilere</i>	<i>kappat etilere</i>	<i>oksubat etilere</i>	<i>dîebet etilere</i>

the durability of the event. In the terminology of viewpoint aspect, the past progressive is an intraterminal item describing an event within its relevant limits.

- (337) *Ütel-ir* *e-ti-m*, *bîek* *ütel-ir*
 work-PTCP.PRS AUX-PST1-1SG always work-PTCP.PRS
e-ti-m.

AUX-PST1-1SG

'I was working, I was always working.'

(SuON_KuNS_19990303_HardLife_conv.SuON.234)

- (338) *Oččogo olus da* *itir-bet* *e-ti-lere*
 then very EMPH get.drunk-NEG.PTCP.PRS AUX-PST1-3PL
ani-gi *kördük*.
 now-ADJZ like

'At that time [people] were not drinking as much as today.'

(PoNA_AkPG_1994_MPXarlampiev_nar.PoNA.081)

Similar contexts can also be expressed with postverbal constructions, e.g. with the auxiliaries *tur-* ‘stand’, *olor-* ‘sit’, *hit-* ‘lie’ and *hirit-* ‘walk’ (see Section 6.4.9). Whether or not there is a functional difference between the past progressive and these forms cannot be answered relying on the material analyzed here and calls for further research.

6.4.3 *Future Tense*

The future tense has the suffix -IAK ~ -IA in Dolgan, which is the suffix of the future participle (see Section 6.3.1.5). To the suffix, the personal endings from set 2 (possessive endings; see Section 6.2) are attached. When the long variant of the suffix -IAK occurs, the suffix-final *k* is voiced in the singular persons. As a result of this voicing process, the shorter variant -IA arose, e.g. in the first person singular: -IAK + -(I)m > -IAgIm > -IAm. In the first and second person singular, the shortened forms occur in the analyzed material almost exclusively (270 vs 2 and 94 vs 0 instances). In the third person singular, there are more shortened than long forms, but not significantly (158 vs 115 instances). The variation of full and shortened forms appears to be free, and the same speaker can use both variants. Moreover, in the first person plural, the suffix-final *k* may occasionally be assimilated to the initial labial plosive of the person ending, yielding the ending -IApIt. Chart 123 shows the affirmative paradigm of four verbs in the future tense.

CHART 123 Future tense affirmative

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
1SG	-IA-m ~ -IAg-Im	<i>barîâm</i> ~ (<i>barîâgim</i>)	<i>kabîâm</i> ~ (<i>kabîâgim</i>)	<i>oksûôm</i> ~ (<i>oksûôgum</i>)	<i>dîêm</i> ~ (<i>dîegim</i>)
2SG	-IA-ŋ ~ -IAg-Iŋ	<i>barîân</i> ~ (<i>barîâgîŋ</i>)	<i>kabîân</i> ~ (<i>kabîâgîŋ</i>)	<i>oksûoŋ</i> ~ (<i>oksûôguy</i>)	<i>dîeŋ</i> ~ (<i>dîegîŋ</i>)
3SG	-IA ~ -IAg-A	<i>barîâ</i> ~ <i>barîâga</i>	<i>kabîâ</i> ~ <i>kabîâga</i>	<i>oksûô</i> ~ <i>oksûôga</i>	<i>dîe</i> ~ <i>dîege</i>
1PL	-IAk-pIt ~ -IAp-plt	<i>barîâkpit</i> ~ (<i>barîâppit</i>)	<i>kabîâkpit</i> ~ (<i>kabîâppit</i>)	<i>oksûokput</i> ~ (<i>oksûôpput</i>)	<i>dîekpit</i> ~ (<i>dîeppit</i>)
2PL	-IAk-kIt	<i>barîâkkit</i>	<i>kabîâkkit</i>	<i>oksûokkut</i>	<i>dîekkit</i>
3PL	-IAk-tArA	<i>barîâktara</i>	<i>kabîâktara</i>	<i>oksûoktara</i>	<i>dîektere</i>

Finally, the first-person singular ending *-m* is rarely realized as *-b*, as shown in example (339). However, this is always facultative and restricted to forms followed by the interrogative clitic *=(I)j*.

- (339) [...] *kaja hir-ten bul-ũ-b=uj?*
 what.kind.of place-ABL find-FUT-1SG=Q
 ‘[Well, such a Siberian jay], where will I find it?’
 (UkET_2002_FoxJayBuzzard_flk.049)

CHART 124 Future tense negative

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>diē-</i> ‘say’
1SG	<i>bariām hũōga</i>	<i>kabiām hũōga</i>	<i>oksũōm hũōga</i>	<i>diēm hũōga</i>
2SG	<i>bariāŋ hũōga</i>	<i>kabiāŋ hũōga</i>	<i>oksũōŋ hũōga</i>	<i>diēŋ hũōga</i>
3SG	<i>bariā hũōga</i>	<i>kabiā hũōga</i>	<i>oksũō hũōga</i>	<i>diē hũōga</i>
1PL	<i>bariākpit hũōga</i>	<i>kabiākpit hũōga</i>	<i>oksũōkput hũōga</i>	<i>diēkpit hũōga</i>
2PL	<i>bariākkit hũōga</i>	<i>kabiākkit hũōga</i>	<i>oksũōkkut hũōga</i>	<i>diēkkit hũōga</i>
3PL	<i>bariāktara hũōga</i>	<i>kabiāktara hũōga</i>	<i>oksũōktara hũōga</i>	<i>diēktara hũōga</i>

The negative forms of the future tense are analytic. They consist of the affirmative future tense form of the verb and the negative existential noun *hũōk*. Interestingly, only the shortened verb forms occur in the negative paradigm. The negative existential noun *hũōk* is additionally inflected with the possessive suffix of the third person singular *-(t)A*, yielding the form *hũōga*. In this context, the very similar forms showing the structure “affirmative future tense form + *hũōk*” shall be mentioned. They, however, are no negative future tense forms, but the negative forms of the probabilitive mood—their formal and functional characteristics are discussed in Section 6.5.6. Very rarely, both the verb and the negative existential noun *hũōk* show person-number marking in the negative future tense. Chart 124 shows the negative paradigm of four verbs in the future tense.

The future tense describes events that will happen after the moment of speech. Unlike the past tenses, the future tense is underspecified for viewpoint aspect and evidentiality.

- (340) *Min giniler-i albin-n-iā-m.*
 1SG.PRO 3PL.PRO-ACC deception-VBZ-FUT-1SG
 ‘I will deceive them.’
 (ChPK_1970_Nganasan_flk.033)

- (341) *Ol tuh-u-nan min kojut üčügej-dik keps-îe-m.*
 that side-POSS.3SG-INS 1SG.PRO later good-ADVZ tell-FUT-1SG
 ‘About that, I will tell later on [in detail].’
 (BeES_1997_HistoryOfKatyryk_nar.045)
- (342) *Huðk, Kîčā: bar-îā huðg-a oskuðla-ga.*
 no Kyyča go-FUT.3SG NEG-3SG school-DAT/LOC
 ‘No, Kyyča will not go to school.’
 (PoNA_19900810_TripToVoločanka_nar.055)

6.4.4 Imperfect

The imperfect is formed based on the present participle -Ar ~ -I:r (see Section 6.3.1.1). The morpheme -Ar attaches to consonant stems, whereas the form -I:r attaches to vowel and diphthong stems, causing the expected morphonological changes described in Sections 6.1 and 6.3.1.1. To the suffix -Ar ~ -I:r, the personal endings of set 2 (possessive endings; see Section 6.2) are attached. Consequently, the emerging forms cannot be distinguished formally from inflected forms of the present participle, as shown in Chart 70 in Section 6.3.1.1. Chart 125 and Chart 126 show the affirmative forms of the imperfect.

The negative forms of the imperfect are formed on the base of the negative present participle -BAT, whereby the usual morphonological processes apply when the suffix is attached to the verbal stem (see Section 6.3.1.2). To the suffix -BAT, the personal endings of set 2 (possessive endings) are attached. This leads to consonant assimilations at the morpheme boundary: the suffix-final *t* turns into *p* and *k* in the first and second person plural, respectively. Chart 127 shows the negative forms of the imperfect. As can be seen, all singular persons are homonymous with the negative forms of the simple past (see Section 6.4.2.1), which is, however, an accidental result of a historical merger. -BAT goes back to *-mAz, and the following vowel belongs to the person-number ending, whereas in the negated simple past tense forms, the morpheme breaks are -BA-tI- ‘NEG-PST1’ so that the vowel belongs to the tense marker (Johanson 2021: 634, 663). Note that Siegl (2020: 237–238) proposes the former segmentation for the negated simple past as well (see Section 6.4.2.1 for a discussion). Additionally, the first- and second-person plural forms are homonymous with the negative present tense forms, which is paradigmatically expected since the personal endings from set 1 (predicative) and set 2 (possessive) do not differ in these persons.

The imperfect is an intraterminal item, which is apparently underspecified for tense. It can refer to both the past and the present, whereby the temporal reference is established via the context. In example (343), the speaker talks about

CHART 125 Imperfect affirmative—Consonant stems

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’
1SG	-Ar-Im	<i>bararim</i>	<i>kabarim</i>	<i>oksorum</i>
2SG	-Ar-İŋ	<i>barariŋ</i>	<i>kabariŋ</i>	<i>oksoruŋ</i>
3SG	-Ar-A	<i>barara</i>	<i>kabara</i>	<i>oksoro</i>
1PL	-Ar-bIt	<i>bararbit</i>	<i>kabarbit</i>	<i>oksorbut</i>
2PL	-Ar-gIt	<i>barargit</i>	<i>kabargit</i>	<i>oksorgut</i>
3PL	-Al-lArA	<i>barallara</i>	<i>kaballara</i>	<i>oksolloro</i>

CHART 126 Imperfect affirmative—Vowel stems

	Morpheme breaks	<i>aha-</i> ‘eat’	<i>dîe-</i> ‘say’
1SG	-İr-Im	<i>ahî:rim</i>	<i>dî:rim</i>
2SG	-İr-İŋ	<i>ahî:rîŋ</i>	<i>dî:rîŋ</i>
3SG	-İr-A	<i>ahî:ra</i>	<i>dî:re</i>
1PL	-İr-bIt	<i>ahî:rbit</i>	<i>dî:rbit</i>
2PL	-İr-gIt	<i>ahî:rgit</i>	<i>dî:rgit</i>
3PL	-İl-lArA	<i>ahî:llara</i>	<i>dî:llere</i>

CHART 127 Imperfect negative

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
1SG	-BAAt-Im	<i>barbatim</i>	<i>kappatim</i>	<i>oksubatim</i>	<i>dîebetim</i>
2SG	-BAAt-İŋ	<i>barbatiŋ</i>	<i>kappatiŋ</i>	<i>oksubatiŋ</i>	<i>dîebetîŋ</i>
3SG	-BAAt-A	<i>barbata</i>	<i>kappata</i>	<i>oksubata</i>	<i>dîebete</i>
1PL	-BAp-pIt	<i>barbappit</i>	<i>kappappit</i>	<i>oksubappit</i>	<i>dîebeppit</i>
2PL	-BAk-kIt	<i>barbakkit</i>	<i>kappakkit</i>	<i>oksubakkit</i>	<i>dîebekkit</i>
3PL	-BAAt-tArA	<i>barbattara</i>	<i>kappattara</i>	<i>oksubattara</i>	<i>dîebettere</i>

reindeer herding and complains that nowadays, reindeer herders are not capable of guarding their reindeer properly. Thus, he makes a general statement referring to the present rather than the past. Example (344) is from an interview where the speaker talks about life in the olden days, explaining how children were educated. In the given sentence, the interviewer emphasizes that the children were helpful earlier; thus, she refers to the past.

- (343) *Taba hurag-a huok hüt-er-e ol.*
 reindeer message-POSS NEG **get.lost-PRS-3SG** that
 ‘Reindeer get lost without a trace.’
 (KiMN_1975_ReindeerHerding_nar.052)

- (344) *Ol kîe kômölöh-öl-lörö da: hin buō?*
 that EMPH **help-PRS-3PL** and however EMPH
 ‘And [the children] were helping a lot, however?’
 (KiPP_KuNS_200211_LifeChildren_conv.KuNS.050)

Unambiguous instances of the negative imperfect are hard to single out given the homonymy in all persons but in third person plural. Additionally, the concurring forms (singular: negative simple past; 1PL, 2PL: negative present) are functionally not incompatible with intraterminal readings, which complicates their disambiguation. In the third person plural, however, unambiguous instances of the negative imperfect can be found as displayed in (345).

- (345) *Karaj-bat-tara tu:gu=j?*
care.about-NEG-PRS-3PL what=Q
 ‘Don’t they care about anything?’
 (KiMN_1975_ReindeerHerding_nar.095)

Given other functionally similar intraterminal items—present tense and habitual referring to the present; past progressive and past habitual referring to the past—the position of the imperfect within the Dolgan tense-aspect system is not completely clear and calls for further research. Finally, the imperfect is a Sakha-Dolgan innovation not known in farther related Turkic languages, whereby, however, the correlating form in Sakha has only past tense reference (Ubrjatova et al. 1982: 315–316, Johanson 2021: 716). Johanson (2021: 716), furthermore, suggests that the Sakha imperfect is copied from Ewen (< Tungusic). This is not far to seek since Ewen indeed exhibits forms that match the Sakha forms both formally and functionally. Items like Ewen *tag-ri-w* ‘sit-AOR-1SG’ and *d’ap-ti-s* ‘eat-AOR-2SG’ are formed with the aorist participle and the possessive

set of verbal endings, meaning ‘I was sitting’ and ‘You were eating’, respectively (Benzing 1955b: 93). Hence, they are clearly intraterminal and refer to the past. However, since the forms do not occur in the Tungusic language family beyond Ewen (Benzing 1955a: 1080), it may also be the case that the Sakha and, consequently, the Dolgan form is not a copy from Ewen ~ Tungusic, but a joint innovation. In any case, mutual contact-induced influence appears to be very likely.

6.4.5 *Habitual*

The habitual in Dolgan is formed based on the habitual participle -A:ččI (see Section 6.3.1.6). When the suffix is attached to a consonant stem, the usual morphonological processes (intervocalic voicing, debuccalization *s* > *h* and vowel syncope in polysyllabic stems) apply. When the suffix is attached to a vowel or a diphthong stem, the suffix-initial vowel is deleted. To the suffix -A:ččI, the personal endings of set 1 (predicative endings; see Section 6.2) are attached. Chart 128 shows the forms of four verbs in the habitual.

CHART 128 Habitual affirmative

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dīe-</i> ‘say’
1SG	-A:ččI-bIn	<i>bara:ččibin</i>	<i>kaba:ččibin</i>	<i>okso:ččubun</i>	<i>dīeččibin</i>
2SG	-A:ččI-gIn	<i>bara:ččigīn</i>	<i>kaba:ččigīn</i>	<i>okso:ččugun</i>	<i>dīeččigīn</i>
3SG	-A:ččI	<i>bara:ččī</i>	<i>kaba:ččī</i>	<i>okso:ččū</i>	<i>dīeččī</i>
1PL	-A:ččI-bIt	<i>bara:ččibīt</i>	<i>kaba:ččibīt</i>	<i>okso:ččubut</i>	<i>dīeččibīt</i>
2PL	-A:ččI-gIt	<i>bara:ččigīt</i>	<i>kaba:ččigīt</i>	<i>okso:ččugut</i>	<i>dīeččigīt</i>
3PL	-A:ččI-lAr	<i>bara:ččilar</i>	<i>kaba:ččilar</i>	<i>okso:ččular</i>	<i>dīeččilar</i>

CHART 129 Habitual negative

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dīe-</i> ‘say’
1SG	<i>bara:ččīta hūōkpun</i>	<i>kaba:ččīta hūōkpun</i>	<i>okso:ččūta hūōkpun</i>	<i>dīeččīte hūōkpun</i>
2SG	<i>bara:ččīta hūōkkun</i>	<i>kaba:ččīta hūōkkun</i>	<i>okso:ččūta hūōkkun</i>	<i>dīeččīte hūōkkun</i>
3SG	<i>bara:ččīta hūōk</i>	<i>kaba:ččīta hūōk</i>	<i>okso:ččūta hūōk</i>	<i>dīeččīte hūōk</i>
1PL	<i>bara:ččīta hūōkput</i>	<i>kaba:ččīta hūōkput</i>	<i>okso:ččūta hūōkput</i>	<i>dīeččīte hūōkput</i>
2PL	<i>bara:ččīta hūōkkut</i>	<i>kaba:ččīta hūōkkut</i>	<i>okso:ččūta hūōkkut</i>	<i>dīeččīte hūōkkut</i>
3PL	<i>bara:ččīta hūōktar</i>	<i>kaba:ččīta hūōktar</i>	<i>okso:ččūta hūōktar</i>	<i>dīeččīte hūōktar</i>

The negated form of the habitual is analytically formed on the base of the habitual participle -A:ččĭ and the negative existential noun *hūōk*. The habitual participle is extended with the third-person singular possessive suffix -(t)A. The personal endings of set 1 (predicative endings; see Section 6.2) are added to *hūōk*. Chart 129 shows the negative forms of the habitual.

First of all, it has to be mentioned that in existing grammatical descriptions, the habitual is usually considered a mood and discussed in the context of devices to express modality (Ubrjatova 1985: 183–184; Li 2011: 159–161; Artem'ev 2013b: 211). However, Stapert (2013: 216) convincingly argues that the habitual in Dolgan is hardly a mood, but rather a tense-aspect form. Indeed, it describes events that usually take place during a particular time, mainly yielding an intraterminal viewpoint aspect reading. Thereby, the event itself and its occurrence are independent of the speaker's attitude towards the event. In (346) and (348), the speaker tells what he regularly does without any evaluation. Likewise, the speaker merely informs about the usual venue of a race in (347), not evaluating the probability, necessity of the event or the desire for the event.

- (346) *Taba-ni hūter-ime-ŋ, harsıŋŋi-ŋitın*
 reindeer-ACC lose-NEG-IMP.2PL next.morning-POSS.2PL.ACC
öjdö:-ŋ, diē-čči-bin.
 remember-IMP.2PL say-HAB-1SG
 ‘‘Do not lose your reindeer, think of tomorrow’’, I use to say.’
 (ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.030)
- (347) *O:l Guba:-ga hırs-a:čči-lar iti diēk.*
 that Guba-DAT/LOC run.a.race-HAB-3PL that to
 ‘They use to run the race there on the [hill] Guba.’
 (KiPP_2009_Story_nar.KiPP.037)
- (348) *Munnuk at-i-nan bar-a:čči-ta hūōk-pun [...]!*
 such horse-EP-INS go-PTCP.HAB-POSS.3SG NEG-1SG
 ‘I usually do not ride such a horse, [bring another horse]!’
 (MiAI_1964_OldPeasantOldWoman_flk.115)

Interestingly, the habitual can also refer to the past, although there is a designated past habitual (see Section 6.4.6). In example (349), it becomes clear from the context that the speaker tells that she and her family used to nomadize in the tundra earlier when she was a child.

(349) *Tundra-ga bihigi köh-ö hild'-a:čči-bit.*
tundra-DAT/LOC 1PL.PRO nomadize-CVB.SIM go.AUX-HAB-1PL
'We used to nomadize in the tundra.'
(BeSN_2009_Family_nar.007)

In sum, the habitual in Dolgan is thus a tense-aspect form that describes an event usually happening at a specific time. Moreover, it is underspecified for tense, as it can refer to both the present and the past. The past reference is then established via fitting adverbials or the context.

6.4.6 *Past Habitual*

In addition to the habitual (see Section 6.4.5), Dolgan also exhibits a past habitual. The past habitual is formed analytically based on the habitual participle -A:ččiI (see Section 6.3.1.6) and the simple past forms of the auxiliary verb *e-* (see Section 6.4.2.1). Chart 130 shows the forms of four verbs of the past habitual.

CHART 130 Past habitual affirmative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dîe-</i> 'say'
1SG	<i>bara:čči etim</i>	<i>kaba:čči etim</i>	<i>okso:čču etim</i>	<i>dîečči etim</i>
2SG	<i>bara:čči etiŋ</i>	<i>kaba:čči etiŋ</i>	<i>okso:čču etiŋ</i>	<i>dîečči etiŋ</i>
3SG	<i>bara:čči ete</i>	<i>kaba:čči ete</i>	<i>okso:čču ete</i>	<i>dîečči ete</i>
1PL	<i>bara:čči etibit</i>	<i>kaba:čči etibit</i>	<i>okso:čču etibit</i>	<i>dîečči etibit</i>
2PL	<i>bara:čči etigit</i>	<i>kaba:čči etigit</i>	<i>okso:čču etigit</i>	<i>dîečči etigit</i>
3PL	<i>bara:čči etilere</i>	<i>kaba:čči etilere</i>	<i>okso:čču etilere</i>	<i>dîečči etilere</i>

CHART 131 Past habitual negative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dîe-</i> 'say'
1SG	<i>bara:ččita huok etim</i>	<i>kaba:ččita huok etim</i>	<i>okso:ččuta huok etim</i>	<i>dîeččite huok etim</i>
2SG	<i>bara:ččita huok etiŋ</i>	<i>kaba:ččita huok etiŋ</i>	<i>okso:ččuta huok etiŋ</i>	<i>dîeččite huok etiŋ</i>
3SG	<i>bara:ččita huok ete</i>	<i>kaba:ččita huok ete</i>	<i>okso:ččuta huok ete</i>	<i>dîeččite huok ete</i>
1PL	<i>bara:ččita huok etibit</i>	<i>kaba:ččita huok etibit</i>	<i>okso:ččuta huok etibit</i>	<i>dîeččite huok etibit</i>
2PL	<i>bara:ččita huok etigit</i>	<i>kaba:ččita huok etigit</i>	<i>okso:ččuta huok etigit</i>	<i>dîeččite huok etigit</i>
3PL	<i>bara:ččita huok etilere</i>	<i>kaba:ččita huok etilere</i>	<i>okso:ččuta huok etilere</i>	<i>dîeččite huok etilere</i>

The negative past habitual is formed analytically on the base of the habitual participle -A:ččl, the negative existential noun *huōk* and the simple past forms of the auxiliary verb *e-*. Chart 131 shows the negative forms of the past habitual.

The past habitual refers to events that used to happen at a given time in the past, i.e. before the moment of speech.

- (350) *Urut ke tīā d'aktat-tar bu tīā-ga*
 earlier PTCL Dolgan woman-PL this tundra-DAT/LOC
törö:-ččü e-ti-lere.
give.birth-PTCP.HAB AUX-PST1-3PL
 'Earlier, Dolgan women used to give birth in the tundra.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.058)
- (351) *Urut kahan da bulta:-čči-ta huōk e-t-e*
 earlier when INDF hunt-PTCP.HAB-POSS.3SG NEG AUX-PST1-3SG
iti kördük.
 that like
 'Before, he never used to hunt like that.'
 (AsKS_19XX_Amulet_nar.214)

It remains to a certain extent unclear whether and how the past habitual and the habitual used in past time contexts differ from each other. No significant differences can be attested based on the material analyzed here, which calls for further research.

6.4.7 Abessive

The abessive in Dolgan is based on the abessive participle -A *ilik* ~ -I: *ilik* ~ -Alik ~ -I:lik, which, in turn, is a combination of the simultaneous converb and the particle *ilik* 'not yet' (see Section 6.3.1.8). To this form, the personal endings of set 1 (predicative endings; see Section 6.2) are attached. The usual morphonological processes apply at the morpheme boundary; in addition, the final *-k* of *ilik* ~ *-lik* can rarely be assimilated to *-p*. Note that even in the contracted forms, vowel harmony does not apply. As for glossing, the non-contracted variants are represented as, e.g. *bar-a ilik-pin* 'go-CVB.SIM not.yet-1SG', whereas the contracted variants are glossed as, e.g. *bar-alik-pin* 'go-ABE-1SG'. This choice is, to some extent, arbitrary and incoherent. However, glossing the particle *ilik* as 'ABE' in the non-contracted forms would neglect the constituting role of the simultaneous converb marker -A ~ -I:. Chart 132 shows the forms of four verbs of the abessive.

The abessive expresses events that have not happened yet at the reference point of time but may still occur in the future. In this respect, the abessive does

CHART 132 Abessive

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
1SG	<i>bara ilikpin ~</i> <i>baralikpin</i>	<i>kaba ilikpin ~</i> <i>kabalikpin</i>	<i>okso ilikpin ~</i> <i>oksolikpin</i>	<i>di: ilikpin ~</i> <i>di:likpin</i>
2SG	<i>bara ilikkin ~</i> <i>baralikkin</i>	<i>kaba ilikkin ~</i> <i>kabalikkin</i>	<i>okso ilikkin ~</i> <i>oksolikkin</i>	<i>di: ilikkin ~</i> <i>di:likkin</i>
3SG	<i>bara ilik ~</i> <i>baralik</i>	<i>kaba ilik ~</i> <i>kabalik</i>	<i>okso ilik ~</i> <i>oksolik</i>	<i>di: ilik ~</i> <i>di:lik</i>
1PL	<i>bara ilikpit ~</i> <i>baralikpit</i>	<i>kaba ilikpit ~</i> <i>kabalikpit</i>	<i>okso ilikpit ~</i> <i>oksolikpit</i>	<i>di: ilikpit ~</i> <i>di:likpit</i>
2PL	<i>bara ilikkit ~</i> <i>baralikkit</i>	<i>kaba ilikkit ~</i> <i>kabalikkit</i>	<i>okso ilikkit ~</i> <i>oksolikkit</i>	<i>di: ilikkit ~</i> <i>di:likkit</i>
3PL	<i>bara ilikter ~</i> <i>baralikter</i>	<i>kaba ilikter ~</i> <i>kabalikter</i>	<i>okso ilikter ~</i> <i>oksolikter</i>	<i>di: ilikter ~</i> <i>di:likter</i>

not make a point. In example (352), it may be that the speaker will pay his debts or not; in example (353), it may likewise be that Dima kills the reindeer later or not.

- (352) *O; huōk, tōl-ü: ilik-pin.*
 oh no pay-CVB.SIM not.yet-1SG
 ‘Oh, no, I have not paid yet.’
 (PoNA_19900322_PoorBoyDevil_flk.199)

- (353) *Huōk ölor-ö ilik.*
 no kill-CVB.SIM not.yet.3SG
 ‘[And then, did Dima kill a reindeer?]-No, he did not kill it yet.’
 (AnIM_AnMSP_2009_Holiday_conv.AnMSP.020)

Due to its intrinsic negative semantics, there is no negative paradigm of the abessive.

6.4.8 Past Abessive

In addition to the abessive (see Section 6.4.7), there is also a past abessive form in Dolgan. It is analytically formed based on the abessive participle -A *ilik* ~ -I: *ilik* ~ -Alik ~ -I:lik (see Section 6.3.1.8) and the simple past forms of the auxiliary verb *e-* (see Section 6.4.2.1). Chart 133 shows the forms of four verbs of the past abessive.

CHART 133 Past abessive

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
1SG	<i>bara ilik etim ~</i> <i>baralik etim</i>	<i>kaba ilik etim ~</i> <i>kabalik etim</i>	<i>okso ilik etim ~</i> <i>oksolik etim</i>	<i>di: ilik etim ~</i> <i>di:lik etim</i>
2SG	<i>bara ilik etiŋ ~</i> <i>baralik etiŋ</i>	<i>kaba ilik etiŋ ~</i> <i>kabalik etiŋ</i>	<i>okso ilik etiŋ ~</i> <i>oksolik etiŋ</i>	<i>di: ilik etiŋ ~</i> <i>di:lik etiŋ</i>
3SG	<i>bara ilik ete ~</i> <i>baralik ete</i>	<i>kaba ilik ete ~</i> <i>kabalik ete</i>	<i>okso ilik ete ~</i> <i>oksolik ete</i>	<i>di: ilik ete ~</i> <i>di:lik ete</i>
1PL	<i>bara ilik etibit ~</i> <i>baralik etibit</i>	<i>kaba ilik etibit ~</i> <i>kabalik etibit</i>	<i>okso ilik etibit ~</i> <i>oksolik etibit</i>	<i>di: ilik etibit ~</i> <i>di:lik etibit</i>
2PL	<i>bara ilik etigit ~</i> <i>baralik etigit</i>	<i>kaba ilik etigit ~</i> <i>kabalik etigit</i>	<i>okso ilik etigit ~</i> <i>oksolik etigit</i>	<i>di: ilik etigit ~</i> <i>di:lik etigit</i>
3PL	<i>bara ilik etilere ~</i> <i>baralik etilere</i>	<i>kaba ilik etilere</i> <i>~ kabalik etilere</i>	<i>okso ilik etilere ~</i> <i>oksolik etilere</i>	<i>di: ilik etilere ~</i> <i>di:lik etilere</i>

The past abessive describes events that had not happened until a particular point in time in the past. Consequently, it is a relative tense, which operates on the same time level as the pluperfect (see Section 6.4.2.4). Given this, it often replaces negative pluperfect forms like in example (354): Here, the speaker describes that there had not been houses in the settlement Katyryk before the arrival of the Soviet authorities.

- (354) *Katirik-ka-r* *oččogo ile d’îe-ler tur-alik*
 Katyryk-POSS.2SG-DAT/LOC then real house-PL stand-PTCP.ABE
e-ti-lere, [...].
 AUX-PST1-3PL
 ‘Until then, real houses had not been standing in Katyryk, [for the first
 time, logs and wood was brought for building houses].’
 (BeES_1997_HistoryOfKatyryk_nar.089)

Given its intrinsic negative semantics, the past abessive does not have a negative paradigm.

6.4.9 Postverbal Constructions

As stated already at many places within this grammar, so-called postverbal constructions express viewpoint aspect and actionality in Dolgan. Postverbal constructions consist of either the sequential or the simultaneous converb (see

Sections 6.3.2.1 and 6.3.2.2) and a finite auxiliary verb. Syntactically spoken, postverbal constructions are, thus, clause chains (see Section 9.1). Nearly three dozen verbs can function as auxiliary verbs in these constructions (see Section 3.5.4 for a list). Before discussing further details of postverbal constructions, example (355) shall serve as an introductory illustration. The auxiliary verb *ke:s-* ‘throw’ is used here to express postterminality since the speaker wishes to tell that the cow had eaten up the fish scales. Additionally, it shall be mentioned already here that postverbal constructions can be ambiguous with respect to their reading. In instances like example (356), both a lexical reading of the second verb and an aspectual reading is available—only the context can disambiguate the clause then (see Däbritz (2019b: 122–124) for details).

- (355) [...] *o-nu ira:kta:gi koruōba-ta hîe-n*
 that-ACC czar cow-POSS.3SG eat-CVB.SEQ
ke:s-pit.
 throw.AUX-PST2.3SG
 ‘[The cook cleaned the fish from its scales in the grass], it was eaten up
 by the czar’s cow.’
 (ChPK_1970_ThreeBoys_flk.030)

- (356) *Aragi: ih-e olor-ol-lor.*
 alcohol drink-CVB.SIM sit(.AUX)-PRS-3PL
 ‘They are sitting and drinking alcohol.’ ~ ‘They are drinking alcohol.’
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.105)

The aspectual value of the postverbal construction is determined by three parameters. The internal phase structure of the auxiliary verb used is by far most important, whereas the tense-aspect form of the auxiliary verb and the choice of the converb itself is less important. Non-transformative auxiliary verbs, most frequently *is-* ‘go’ and *hirit-* ‘walk’, express intraterminal viewpoint aspect. In many cases, they are combined with non-transformative lexical verbs like in example (357). If they are combined with transformative lexical verbs, not necessarily intraterminality is expressed, but also inchoative (358) or frequentative (359) actionality.

- (357) *It uōl-a erd-en is-pit.*
 dog son-POSS.3SG row-CVB.SEQ go.AUX-PST2.3SG
 ‘The dog’s son was rowing.’
 (ChPK_1970_ThreeBoys_flk.080)

- (358) [...] *onton tuôlkula:-n is-ti-m,*
 then understand-CVB.SEQ go.AUX-PST1-1SG
bil-en is-ti-m.
 get.to.know-CVB.SEQ go.AUX-PST1-1SG
 ‘[And more recently] then I began to understand, to perceive.’
 (AnMS_1972_GoodSovietTimes_nar.007)
- (359) *Pas’olak-ka kîr-en is-pit-ij?*
 village-DAT/LOC go.in-CVB.SEQ go.AUX-PST2-2SG
 ‘You did constantly go to the village [for giving birth]?’
 (KiPP_KuNS_200211_LifeChildren_conv.KuNS.033)

Transformative auxiliary verbs, in turn, are to be split into finittransformative verbs and initiotransformative verbs. Finittransformative auxiliary verbs, most frequently *ka:l-* ‘stay (back)’, *kebis-* ~ *ke:s-* ‘throw’, *tus-* ~ *tüs-* ‘fall’, *il-* ‘take’, *kel-* ‘come’ and *bîr-* ‘give’, express postterminality like in example (360). When combined with non-transformative verbs, the expression of postterminality may additionally entail inchoative actionality, as in example (361).

- (360) [...] *ed’ij-e toj-on ka:l-bit.*
 elder.sister-POSS.3SG freeze-CVB.SEQ stay.AUX-PST2.3SG
 ‘[He woke up and saw], his sister has frozen to death.’
 (AkEE_19XX_BoySister_flk.019)
- (361) *Katirik-ka, Katirik-ka ülel-i:*
 Katyryk-DAT/LOC Katyryk-DAT/LOC work-CVB.SIM
tüs-tü-m.
 fall.AUX-PST1-1SG
 ‘In Katyryk, I began to work in Katyryk.’
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.024)

Initiotransformative verbs, most frequently *tur-* ‘stand (up)’, *hit-* ‘lie (down)’ and *olor-* ‘sit (down)’, can express both intraterminality and postterminality when appearing as an auxiliary verb. Their internal phase structure can explain this correlation since the transgression of the verb’s relevant limit (e.g. sitting down) is prototypically followed by a constantly ongoing event (e.g. sitting). Given this, example (362) is in principle ambiguous concerning the viewpoint aspect expressed. Only from the given context can it be concluded that the intraterminal reading is intended here.

- (362) *Kokoro:k orguj-a tur-but.*
 kettle boil-CVB.SIM stand(.up).AUX-PST2.3SG
 ‘The kettle boiled up.’ ~ ‘The kettle was boiling.’
 (ErSV_1964_WarBirdsAnimals_flk.560)

The tense-aspect form of the auxiliary verb does not seem to have a decisive impact on the aspectual reading of the whole construction. Often intraterminal items—like the present tense in example (363)—yield an intraterminal reading, and postterminal items—like the postterminal evidential past in example (364)—yield a postterminal reading.

- (363) *Kör-büt-e – et buh-a tur-ar, ogo-lor*
 see-PST2-3SG meat boil-CVB.SIM stand.AUX-PRS.3SG child-PL
utuj-a hit-al-lar.
 sleep-CVB.SIM lie.AUX-PRS-3PL
 ‘He saw [that] the meat was boiling and the children were sleeping.’
 (PoS_PrG_1964_Lyybyra_flk.069)

- (364) *Öksökü: ijirta:n ke:s-pit.*
 Öksökü devour-CVB.SEQ throw.AUX-PST2.3SG
 ‘Öksökü devoured them.’
 (ErSV_1964_WarBirdsAnimals_flk.237)

However, instances like in the examples (357) and (362) above contradict this tendency since the postterminal evidential past nonetheless can yield an intraterminal item. In these cases, the internal phase structure of the auxiliary appears to override the intrinsic aspectual value of the tense-aspect form. Besides the observed correlations, there are no constraints concerning the morphological forms of the auxiliary verb in postverbal constructions. All kinds of finite verb forms, both tense-aspect and mood forms, and non-finite forms occur regularly. This circumstance underlines once more the assumption that postverbal constructions are indeed clause chains and not instances of coordination or subordination.

The choice of the converb—sequential versus simultaneous converb—does not directly correlate to the aspectual value expressed by the whole verb sequence. Instead, as was shown by Däbritz (2019b: 118), it does correlate to the internal phase structure of the auxiliary verb used. The simultaneous converb occurs more often with non-transformative auxiliary verbs, and the sequential converb occurs more often with transformative auxiliary verbs. Nonetheless, as shown in the examples displayed above, this is once more a tendency and no strict rule.

CHART 134 Auxiliary verbs and aspectual value

Verb	Lexical meaning	Internal phase structure	Aspectual value
<i>hirit-</i>	'go; walk'	non-transformative	intraterminal
<i>is-</i>	'go'	non-transformative	intraterminal
<i>ka:l-</i>	'stay (back)'	finitransformative	postterminal
<i>kebis- ~ ke:s-</i>	'throw'	finitransformative	postterminal
<i>tus- ~ tüs-</i>	'fall'	finitransformative	postterminal
<i>il-</i>	'take'	finitransformative	postterminal
<i>kel-</i>	'come'	finitransformative	postterminal
<i>bîer-</i>	'give'	finitransformative	postterminal
<i>tart-</i>	'pull'	finitransformative	postterminal
<i>büt-</i>	'stop'	finitransformative	postterminal
<i>ogus-</i>	'beat'	finitransformative	postterminal
<i>bar-</i>	'go (away)'	initiotransformative	postterminal, intraterminal
<i>tur-</i>	'stand (up)'	initiotransformative	postterminal, intraterminal
<i>hit-</i>	'lie (down)'	initiotransformative	postterminal, intraterminal
<i>olor-</i>	'sit (down)'	initiotransformative	postterminal, intraterminal

Chart 134 summarizes the most frequent auxiliary verbs occurring in Dolgan postverbal constructions, their internal phase structure, and the aspectual value they prototypically express.

As for the negation of postverbal constructions in Dolgan, it has to be stated that they are apparently not negated. It could be expected that the negative simultaneous converb -BAkkA (see Section 6.3.2.3) or the negative converb -(I)m(I)na ~ -(I)mIja ~ -(I)mIn'a (see Section 6.3.2.7) are used instead of the simultaneous and sequential converb, respectively, in negative contexts. This, however, is not the case (see also Siegl (2020: 256–260) for a detailed discussion). In example (365), both verbs must be interpreted lexically, and a grammaticalized reading of the type “the children were not breathing” is not available.

- (365) *Ogo-lor huorgan-narin ih-i-ger*
 child-PL blanket-POSS.3PL.GEN inside-POSS.3SG-DAT/LOC
ti:m-makka hip-pit-tara.
 breath-NEG.CVB.SIM lie-PST2-3PL
 'The children were lying under the blanket without breathing.'
 (PoNA_2004_MikaMukulajAloneAtHome_nar.022)

The lack of negation of the converb included in a postverbal construction can, thus, probably be explained by the fact that the negative simultaneous converb -BAkkA and the negative converb -(I)m(I)na ~ -(I)mIja ~ -(I)mIn'a form subordinate clauses instead of clause chains. However, the lack of negative forms of the auxiliary verbs included in postverbal constructions is more surprising. Given the high total amount of the latter in the analyzed material (ca. 1,500 instances), this can hardly be coincidental. It remains a task for further research to examine the reasons for the lack of negated postverbal constructions in Dolgan, especially against the background that in other Turkic languages, such structures are perfectly possible.

Summing this section up, postverbal constructions are an additional means to express viewpoint aspect and actionality in Dolgan. Primarily, the choice of the auxiliary determines the aspectual value expressed: Non-transformative auxiliary verbs yield intraterminals, and transformative auxiliary verbs yield postterminals. However, the complex interaction of tense, aspect and actionality in postverbal constructions is not fully understood yet and calls for further research.

6.5 Mood, Modality and Illocution

The linguistic category of mood and modality is undoubtedly one of the most debated, lacking precise terminology and concise description. Here, the terms *mood* and *modality* are conceived as follows: *Mood* formally designates a verbal inflectional category, whereas *modality* designates its semantic features. First of all, mood and modality have to be delimited against the category of *illocution*. The latter describes sentences as instances of speech acts, whereas modality is concerned with modifying the content of speech acts (Hengeveld 2004: 1190). Thus, items like *imperative* or *prohibitive* are strictly speaking not expressions of modality but illocution (Hengeveld 2004: 1191). However, they are also dealt with in this section since they are traditionally discussed together with modality and share some formal properties with other moods, e.g. unmarkedness for tense.

CHART 135 Illocution, modality and mood

Illocution	Modality	Mood	Marker / Form
declarative & interrogative	epistemic modality— real	indicative	–
		conditional-temporal	-TAK
	epistemic modality— irreal	abessive conditional-temporal	-TAK + <i>ilik</i> ‘not yet’
		conditional	-TAr
		counterfactual	-IAK + <i>e-</i>
		probabilitiv	-I:hI
	deontic modality	necessitative 1	-LA:K
		necessitative 2	-IAK-POSS.ACC + <i>na:da</i>
		necessitative 3	-IAK-POSS + <i>ba:ra</i>
	desiderative/volitive modality	intentional	-IAk-tI (1P, 2P) -IAk-tIn(-nAr) (3P)
imperative	irreal	imperative	–
		future imperative	-Ar
prohibitive	irreal	potential-admonitive	-A:jA

Moreover, the relationship between the categories of modality and evidentiality is complex and calls for comment. Some authors include evidentiality in the system of modality, e.g. Hengeveld (2004: 1193), labelling it *proposition-oriented modality*. However, other authors (e.g. Plungian 2001, Aikhenvald 2006) clearly state that the two categories must be kept apart. Here, the latter approach is followed. Therefore, forms expressing evidentiality are discussed separately in Section 6.6.

In Dolgan, thirteen verbal forms express illocution and modality; thus, there are thirteen moods. Chart 135 gives an overview and links the list of moods to the categories of modality and illocution.

Although it might appear unorthodox—especially postponing the imperative to the end of the section—the moods occurring in Dolgan are dealt with according to the given structure. Sections 6.5.1 to 6.5.6 discuss the moods concerned with epistemic modality. Section 6.5.7 is devoted to deontic modality, and Section 6.5.8 is devoted to desiderative/volitive modality. Sections 6.5.9 to 6.5.11, finally, deal with imperative and prohibitive illocution.

6.5.1 *Indicative*

The indicative mood is the only unmarked mood in Dolgan. It describes events without any modal connotation, i.e. it is without any connotation of probability, the speaker's desire or the like. Therefore, the indicative mood is not marked in glossing either in this grammar. Example (366) shows the usage of the indicative mood—in other words, a clause morphologically unmarked for mood.

- (366) *Kün aji ilim-nen-e kir-er.*
 day at.every net-VBZ-CVB.SIM go.in-PRS.3SG
 'Every day, he goes [on the lake] to fish with nets.'
 (PoXN_19701118_Chopochuka_flk.003)

6.5.2 *Conditional-Temporal*

The conditional-temporal mood is formed based on the conditional participle -TAK attached to the verbal stem (see Section 6.3.1.7). To the suffix -TAK, the endings from set 3 (conditional endings; see Section 6.2) are added. This leads to the usual consonant assimilations at the morpheme boundary; moreover, in the third person singular, the final *k* of the mood suffix is voiced to *g*. Note that the suffix -TAK does not cause metathesis in polysyllabic verb stems. Chart 136 shows the forms of the conditional-temporal mood of four verbs.

The negative forms of the conditional-temporal mood are formed with the negative suffix -BA and the conditional participle -TAK. As described in Section 6.3.1.4, combining these suffixes also yields the negative postterminal past par-

CHART 136 Conditional-temporal mood affirmative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	-TAK-pInA	<i>bardakpina(n)</i>	<i>kaptakpina(n)</i>	<i>ogustakpina(n)</i>	<i>diētekpine(n)</i>
2SG	-TAK-kInA	<i>bardakkina(n)</i>	<i>kaptakkina(n)</i>	<i>ogustakkina(n)</i>	<i>diētekkine(n)</i>
3SG	-TAg-InA	<i>bardagina(n)</i>	<i>kaptagina(n)</i>	<i>ogustagina(n)</i>	<i>diēteGINE(n)</i>
1PL	-TAK-pItInA	<i>bardakpitina(n)</i>	<i>kaptakpitina(n)</i>	<i>ogustakpitina(n)</i>	<i>diētekpitine(n)</i>
2PL	-TAK-kItInA	<i>bardakkitina(n)</i>	<i>kaptakkitina(n)</i>	<i>ogustakkitina(n)</i>	<i>diētekkitine(n)</i>
3PL	-TAK-tArInA	<i>bardaktarina(n)</i>	<i>kaptaktarina(n)</i>	<i>ogustaktarina(n)</i>	<i>diētektetine(n)</i>

CHART 137 Conditional-temporal mood negative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	-BA-tAk-pInA	<i>barbatakpina(n)</i>	<i>kappatakpina(n)</i>	<i>oksubatakpina(n)</i>	<i>diēbetekpine(n)</i>
2SG	-BA-tAk-kInA	<i>barbatakkina(n)</i>	<i>kappatakkina(n)</i>	<i>oksubatakkina(n)</i>	<i>diēbetekKine(n)</i>
3SG	-BA-tAg-InA	<i>barbatagina(n)</i>	<i>kappatagina(n)</i>	<i>oksubatagina(n)</i>	<i>diēbetegine(n)</i>
1PL	-BA-tAk-pItInA	<i>barbatakpitina(n)</i>	<i>kappatakpitina(n)</i>	<i>oksubatakpitina(n)</i>	<i>diēbetekpitine(n)</i>
2PL	-BA-tAk-kItInA	<i>barbatakkitina(n)</i>	<i>kappatakkitina(n)</i>	<i>oksubatakkitina(n)</i>	<i>diēbetekkitine(n)</i>
3PL	-BA-tAk-tArInA	<i>barbataktarina(n)</i>	<i>kappataktarina(n)</i>	<i>oksubataktarina(n)</i>	<i>diēbetektetine(n)</i>

ticiples -BA_tAK. For the sake of lucidity, the glossing of both forms is kept apart in this grammar: The negative postterminal past participle -BA_tAK is glossed as NEG.PTCP.PST, and the negative conditional-temporal mood -BA_tAK is glossed as NEG-COND/TEMP. The personal endings used are the same as in the affirmative forms. Chart 137 shows the negative forms of the conditional-temporal mood of four verbs.

First, it has to be mentioned that the conditional-temporal mood only occurs in subordinate clauses, more precisely, in temporal and conditional clauses (see Section 9.3.3). This correlation can be explained diachronically: As described above, the forms are historically participle forms, inflected with possessive and case suffixes.

The conditional-temporal mood can form both temporals and conditionals in subordinate clauses, either expressing epistemic modality. Temporals describe a simple temporal connection of two events, which are most often real. The temporal reference depends on the tense used in the matrix clause; example (367) refers to the present, and example (368) refers to the past.

- (367) *Kîêhe kel-leg-ine, kajdak gin-a:čči-gin=ij ke?*
 evening come-TEMP-3SG how make-HAB-2SG=Q well
 ‘When it [a devil] comes in the evening, what do you do?’
 (KiMN_19900417_Milkmaid_flk.248)
- (368) *Kaja, bu olor-dog-una, kuka:ki: köt-ön kel-bit.*
 well this sit-TEMP-3SG Siberian.jay fly-CVB.SEQ come-PST2.3SG
 ‘Well, when it [a buzzard] was sitting so, a Siberian jay came flying.’
 (UkET_2002_FoxJayBuzzard_flk.024)

In conditional clauses, the conditional-temporal mood expresses both factual/implicative and predictive conditionals. Factual/implicative conditionals express that an event always takes place depending on another event. Thereby, no concrete event is referred to (369). Predictive conditionals also express that an event occurs depending on another event. However, here, the speaker refers to a concrete hypothetical event in the future which they assume to be entirely possible (370). Note that the conditional-temporal mood is used exclusively in the subordinate clause, coding the event on which the other event depends.

- (369) *Bu tugut-a törö:-tög-üne d’apču*
 this reindeer.calf-POSS.3SG be.born-COND-3SG Dyapchu
dîe-n a:t-tan-a:čči.
 say-CVB.SEQ name-VBZ-HAB.3SG
 ‘If such a reindeer calf is born, one calls it “Dyapchu”’
 (KiMN_1975_ReindeerHerdning_nar.024)
- (370) *Hundu:k-tar-i, koruôpka-lar-i biêr-dek-kitine keps-iê-m.*
 chest-PL-ACC box-PL-ACC give-COND-2PL tell-FUT-1SG
 ‘If you give me the chest and the box, I will tell you.’
 (ErSV_1964_WarBirdsAnimals_flk.331)

Counterfactual conditionals, in turn, are not expressed with the conditional-temporal mood but with the conditional mood (see Section 6.5.4) and the counterfactual mood (see Section 6.5.5).

Finally, the particles *bûôllagina* and *bûôllaktarina* have to be mentioned here since they are lexicalized conditional-temporal forms, cf. *bûôl-lag-ina* ‘be-COND/TEMP-3SG’ and *bûôl-lak-tarina* ‘be-COND/TEMP-3PL’. The functions of these particles are described in detail in Section 3.8.

6.5.3 *Abessive Conditional-Temporal*

The abessive conditional-temporal mood combines one tense-aspect form with one modal form: the abessive (see Section 6.4.7) and the conditional-temporal mood (see Section 6.5.2). In Section 6.3.1.8, it was stated that the abessive participle -A *ilik* ~ -I: *ilik* ~ -Alik ~ -I:lik is synchronically not inflected for case and possession. Diachronically, however, the combination of a possessive suffix and the locative (*-nA) or instrumental (-nAn) case—which nowadays form the personal endings from set 3 (conditional endings; see Section 6.2)—could be attached. This yields the forms of the abessive conditional-temporal mood, as shown in Chart 138. Given the inherent negative semantics of the abessive, there are no negated forms available.

CHART 138 Abessive conditional-temporal mood

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
1SG	<i>bara ilikpine(n) ~ baralikpine(n)</i>	<i>kaba ilikpine(n) ~ kabalikpine(n)</i>	<i>okso ilikpine(n) ~ oksolikpine(n)</i>	<i>dî: ilikpine(n) ~ dî:likpine(n)</i>
2SG	<i>bara ilikkine(n) ~ baralikkine(n)</i>	<i>kaba ilikkine(n) ~ kabalikkine(n)</i>	<i>okso ilikkine(n) ~ oksolikkine(n)</i>	<i>dî: ilikkine(n) ~ dî:likkine(n)</i>
3SG	<i>bara iligine(n) ~ baraligine(n)</i>	<i>kaba iligine(n) ~ kabaligine(n)</i>	<i>okso iligine(n) ~ oksoligine(n)</i>	<i>dî: iligine(n) ~ dî:ligine(n)</i>
1PL	<i>bara ilikpitine(n) ~ baralikpitine(n)</i>	<i>kaba ilikpitine(n) ~ kabalikpitine(n)</i>	<i>okso ilikpitine(n) ~ oksolikpitine(n)</i>	<i>dî: ilikpitine(n) ~ dî:likpitine(n)</i>
2PL	<i>bara ilikkitine(n) ~ baralikkitine(n)</i>	<i>kaba ilikkitine(n) ~ kabalikkitine(n)</i>	<i>okso ilikkitine(n) ~ oksolikkitine(n)</i>	<i>dî: ilikkitine(n) ~ dî:likkitine(n)</i>
3PL	<i>bara ilikterine(n) ~ baralikterine(n)</i>	<i>kaba ilikterine(n) ~ kabalikterine(n)</i>	<i>okso ilikterine(n) ~ oksolikterine(n)</i>	<i>dî: ilikterine(n) ~ dî:likterine(n)</i>

Functionally, the abessive conditional-temporal mood combines the functions of the abessive tense-aspect form and the conditional-temporal mood. Consequently, it occurs exclusively in subordinate (conditional and temporal) clauses. In temporal clauses, the form expresses that an event has not happened yet at a given time when another event is happening (371). Conditional clauses formed with the abessive conditional-temporal mood are very rare, and only a few instances could be found in the INEL Dolgan Corpus (372). Additionally, it has to be mentioned that the conditional reading is not finally clear here, a temporal reading being principally available, too.

- (371) [...] *er-ge* *bîer-elig-ine* *îâl-tan* *îâl-ga*
 man-DAT/LOC give-ABE-3SG family-ABL family-DAT/LOC
hild'-a:ččî-bit.
 go-HAB-1PL
 '[When my mother died, after I had been married, eh], when she had
 not yet married me off, we went from family to family.'
 (KiPP_2009_Belief_nar.KiPP.040)

- (372) *Keps-i* *ilik-kinen* *min* *enîe-ke*
 tell-CVB.SIM not.yet-2SG 1SG.PRO 2SG.PRO-DAT/LOC
er-ge *bar-bap-pin.*
 man-DAT/LOC go-NEG.PRS-1SG
 'As long as you do not tell me, I will not marry you.'
 (KiMN_19900417_Milkmaid_flk.116)

6.5.4 *Conditional*

A further form expressing epistemic modality, called *conditional* here, is formed with the suffix -TAr in Dolgan. The suffix is directly attached to vowel and diphthong stems, causing no morphonological changes, whereby the suffix-initial consonant is *-t*. When connected to a consonant stem, the latter remains unchanged and does not exhibit metathesis. The suffix-initial consonant is *-t* in the case of voiceless stem-final consonants and *-d* in the case of voiced stem-final consonants (except for nasals and *l*). When attached to a stem ending with a nasal, the suffix-initial consonant is *n*; when attached to a stem ending with *l*, the suffix-initial consonant is *l*, too. Chart 139 summarizes the emerging allomorphs of the conditional mood suffix.

To the suffix, the personal endings of set 1 (predicative endings; see Section 6.2) are attached. Note that in the third person plural, the suffix-final *r* is assimilated to *l*. Chart 140 shows the forms of the conditional of four verbs. The negative forms of the conditional mood are formed with the negative suffix -BA and the same mood suffix -TAr described above. The usual morphonological processes apply, including metathesis in polysyllabic stems that is absent in the affirmative forms. Chart 141 shows the negative forms of the conditional.

Like the conditional-temporal mood, the conditional mood is present only in subordinate clauses. It forms conditionals exclusively, expressing an event on which another event depends. Thereby, the speaker can conceive the event as both possible and impossible; thus, the conditional mood forms predictive and counterfactual conditionals. Whether the former or latter is expressed can be seen from the verb form in the matrix clause (see Section 9.3.3.2 on conditional clauses).

CHART 139 Allomorphs of the conditional mood suffix

Preceding environment	Allomorphs
V, C _{-voice}	<i>-tar, -ter, -tor, -tör</i>
C _{+voice, -nas, -lat}	<i>-dar, -der, -dor, -dör</i>
C _{+voice, +nas}	<i>-nar, -ner, -nor, -nör</i>
C _{+voice, +lat}	<i>-lar, -ler, -lor, -lör</i>

CHART 140 Conditional mood affirmative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	-TAr-bIn	<i>bardarbin</i>	<i>kaptarbin</i>	<i>ogustarbin</i>	<i>diēterbin</i>
2SG	-TAr-gIn	<i>bardargin</i>	<i>kaptargin</i>	<i>ogustargin</i>	<i>diētergin</i>
3SG	-TAr	<i>bardar</i>	<i>kaptar</i>	<i>ogustar</i>	<i>diēter</i>
1PL	-TAr-bIt	<i>bardarbit</i>	<i>kaptarbit</i>	<i>ogustarbit</i>	<i>diēterbit</i>
2PL	-TAr-gIt	<i>bardargit</i>	<i>kaptargit</i>	<i>ogustargit</i>	<i>diētergit</i>
3PL	-TAl-lAr	<i>bardallar</i>	<i>kaptallar</i>	<i>ogustallar</i>	<i>diēteller</i>

CHART 141 Conditional mood negative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	-BA-tAr-bIn	<i>barbatarbin</i>	<i>kappatarbin</i>	<i>oksubatarbin</i>	<i>diēbeterbin</i>
2SG	-BA-tAr-gIn	<i>barbatargin</i>	<i>kappatargin</i>	<i>oksubatargin</i>	<i>diēbetergin</i>
3SG	-BA-tAr	<i>barbatar</i>	<i>kappatar</i>	<i>oksubatar</i>	<i>diēbeter</i>
1PL	-BA-tAr-bIt	<i>barbatarbit</i>	<i>kappatarbit</i>	<i>oksubatarbit</i>	<i>diēbeterbit</i>
2PL	-BA-tAr-gIt	<i>barbatargit</i>	<i>kappatargit</i>	<i>oksubatargit</i>	<i>diēbetergit</i>
3PL	-BA-tAl-lAr	<i>barbatallar</i>	<i>kappatallar</i>	<i>oksubatallar</i>	<i>diēbeteller</i>

The conditional mood itself has no temporal reference, but its forms can be combined with different verb forms to establish temporal reference. When used like shown in the above charts, it has present tense reference, or even future tense reference may be implied (373). Past tense reference is established with the postterminal past participles -BIT (affirmative) and -BAtAK (negative) of the main verb and the conditional forms of the auxiliary verb *bûol-* ((374) and (375)). Person-number marking is established at the participle of the main verb, and not at the auxiliary verb. Given that unaccomplished events in the past are not real, the latter examples convey a counterfactual reading.

- (373) *Ölör-dör-gün ere h-îek-pit!*
kill-COND-2SG just eat-FUT-1PL
 'If you kill [it], we will eat [it]!' (BaA_1930_OldManOldWoman_flk.014)
- (374) *Bil-bit-im buol-lar hîe-n*
know-PTCP.PST-POSS.1SG become.AUX-COND.3SG eat-CVB.SEQ
ke:h-îe e-ti-m buô!
throw-PTCP.FUT AUX-PST1-1SG EMPH
 'If I had known [it], I would have eaten [him]!' (BeVP_1970_BaldheadedOrphanBoy_flk.047)
- (375) *Ogo-gun il-batag-ij*
child-POSS.2SG.ACC take-NEG.PTCP.PST-POSS.2SG
bûol-lar ölör-üök e-ti-m!
become.AUX-COND.3SG kill-PTCP.FUT AUX-PST1-1SG
 'If you had not taken the child, I would have killed [it]!' (BoND_1964_ThreeBrothers_flk.117)

Finally, the form *bûollar* (third person singular of *bûol-* 'be; become') has developed into a particle often used to express adversative contexts that literally can be translated as 'though being like that ...'.

- (376) *Ol da buol-lar ü:leh-i-ger*
that and be-COND.3SG chimney-POSS.3SG-DAT/LOC
itti-bit.
climb-PST2.3SG
 'Nevertheless, she climbed up to the chimney.' (BaA_1930_OldManOldWoman_flk.054)

6.5.5 Counterfactual

The counterfactual is a mood expressing epistemic modality formed analytically with the future participle -IAK and the simple past forms of the auxiliary verb *e-*. For the morphonological behaviour of the future participle, when attached to the verbal stem, see Section 6.3.1.5. Person-number reference is usually established at the auxiliary verb, as shown in Chart 142. Exceptionally, person-number can also be marked at the participle, whereby the auxiliary *e-* exhibits third-person singular marking. The negative forms are formed with the future participle -IAK, the negative existential noun *hūōk* and the simple past forms of the auxiliary verb *e-*. Chart 143 shows the negative forms of the counterfactual mood.

CHART 142 Counterfactual mood affirmative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dīe-</i> 'say'
1SG	<i>barīāk etim</i>	<i>kabīāk etim</i>	<i>oksūōk etim</i>	<i>dīēk etim</i>
2SG	<i>barīāk etiṇ</i>	<i>kabīāk etiṇ</i>	<i>oksūōk etiṇ</i>	<i>dīēk etiṇ</i>
3SG	<i>barīāk ete</i>	<i>kabīāk ete</i>	<i>oksūōk ete</i>	<i>dīēk ete</i>
1PL	<i>barīāk etibit</i>	<i>kabīāk etibit</i>	<i>oksūōk etibit</i>	<i>dīēk etibit</i>
2PL	<i>barīāk etigit</i>	<i>kabīāk etigit</i>	<i>oksūōk etigit</i>	<i>dīēk etigit</i>
3PL	<i>barīāk etilere</i>	<i>kabīāk etilere</i>	<i>oksūōk etilere</i>	<i>dīēk etilere</i>

CHART 143 Counterfactual mood negative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dīe-</i> 'say'
1SG	<i>barīāk hūōk etim</i>	<i>kabīāk hūōk etim</i>	<i>oksūōk hūōk etim</i>	<i>dīēk hūōk etim</i>
2SG	<i>barīāk hūōk etiṇ</i>	<i>kabīāk hūōk etiṇ</i>	<i>oksūōk hūōk etiṇ</i>	<i>dīēk hūōk etiṇ</i>
3SG	<i>barīāk hūōk ete</i>	<i>kabīāk hūōk ete</i>	<i>oksūōk hūōk ete</i>	<i>dīēk hūōk ete</i>
1PL	<i>barīāk hūōk etibit</i>	<i>kabīāk hūōk etibit</i>	<i>oksūōk hūōk etibit</i>	<i>dīēk hūōk etibit</i>
2PL	<i>barīāk hūōk etigit</i>	<i>kabīāk hūōk etigit</i>	<i>oksūōk hūōk etigit</i>	<i>dīēk hūōk etigit</i>
3PL	<i>barīāk hūōk etilere</i>	<i>kabīāk hūōk etilere</i>	<i>oksūōk hūōk etilere</i>	<i>dīēk hūōk etilere</i>

The counterfactual mood expresses events conceived as unreal or factually wrong by the speaker. In contrast to the conditional-temporal and the conditional mood, the form is not restricted to subordinate clauses. In turn, it often occurs in matrix clauses, combined with the conditional mood in the subor-

dinate clause, forming a counterfactual conditional clause (see Section 9.3.3.2 on conditional clauses). However, it can also occur in a bare simple clause, whereby the “condition” of the event not going on can be derived from the context. Example (377) shows the counterfactual mood in a bare simple clause. Example (378) shows it in a complex clause together with the conditional mood in the subordinate clause.

- (377) *Ičči-lerin it-tar ür-üö huök e-ti-lere.*
 master-POSS.3PLACC dog-PL bark-PTCP.FUT NEG AUX-PST1-3PL
 ‘The dogs would not bark at their master.’
 (ChPK_1970_Nganasan_flk.005)

- (378) *Tübes-ter-gin kördör-üök e-ti-m.*
 get.into-COND-2SG show-PTCP.FUT AUX-PST1-1SG
 ‘If I had gotten you [lit. if you had fallen into me], I would have shown it.’
 (BaA_1930_FireInSmallTent_flk.040)

6.5.6 Probabilitiv

The probabilitiv mood is formed with the suffix -I:hI in Dolgan, to which the person-number endings of set 1 (predicative endings; see Section 6.2) are attached. The mood suffix is directly attached to consonant stems, giving rise to morphonological processes such as consonant assimilations, intervocalic voicing, the debuccalization *s* > *h* and vowel syncope in polysyllabic stems. In the case of vowel stems, the stem-final vowel is replaced by the initial vowel of the suffix. In the case of diphthong stems, the same pattern is expected but cannot be proven due to the lack of expressive forms in the available material. Chart 144 shows the affirmative forms of the probabilitiv mood.

Coming to the negative forms of the probabilitiv mood, much variation and many uncertainties can be observed. Existing grammatical descriptions describe both a synthetic and an analytic negative form of the probabilitiv mood. According to Artem'ev (2013b: 213), the former is formed with the negative suffix -(I)m, which is inserted between the stem and the mood marker, yielding forms like *barim̃:hibin*, *barim̃:higin* etc. The analytic negative form contains the affirmative future tense form and the negative existential noun *huök*, yielding forms like *bariām huök*, *bariāŋ huök* (Ubrjatova 1985: 185; Artem'ev 2013b: 213). In the material analyzed here, no instances of the synthetic form occur, but a dozen instances of the analytic form. Therefore, the latter is assumed to be the standard means of expressing the negative probabilitiv mood in Dolgan, Chart 145 showing the complete paradigm.

CHART 144 Probabilitive mood affirmative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>aha:-</i> 'eat' ^a
1SG	-I:hl-bIn	<i>bari:hibin</i>	<i>kabi:hibin</i>	<i>oksu:hubun</i>	<i>ahi:hibin</i>
2SG	-I:hl-gIn	<i>bari:higin</i>	<i>kabi:higin</i>	<i>oksu:hugun</i>	<i>ahi:higin</i>
3SG	-I:hl	<i>bari:hi</i>	<i>kabi:hi</i>	<i>oksu:hu</i>	<i>ahi:hi</i>
1PL	-I:hl-bIt	<i>bari:hibit</i>	<i>kabi:hibit</i>	<i>oksu:hubut</i>	<i>ahi:hibit</i>
2PL	-I:hl-gIt	<i>bari:higit</i>	<i>kabi:higit</i>	<i>oksu:hugut</i>	<i>ahi:higit</i>
3PL	-I:hl-lAr	<i>bari:hilar</i>	<i>kabi:hilar</i>	<i>oksu:hular</i>	<i>ahi:hilar</i>

- a Since there are no instances of the verb *diē-* 'say' in the INEL Dolgan Corpus, instead the forms of *aha:-* 'eat' are given here. Expectedly, the forms of *diē-* would be *di:hibin*, *di:higin* etc.

CHART 145 Probabilitive mood negative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	<i>bariām huōk</i>	<i>kabiām huōk</i>	<i>oksuōm huōk</i>	<i>diēm huōk</i>
2SG	<i>bariāy huōk</i>	<i>kabiāy huōk</i>	<i>oksuōy huōk</i>	<i>diēy huōk</i>
3SG	<i>bariā huōk</i>	<i>kabiā huōk</i>	<i>oksuō huōk</i>	<i>diē huōk</i>
1PL	<i>bariākpit huōk</i>	<i>kabiākpit huōk</i>	<i>oksuōkput huōk</i>	<i>diēkpit huōk</i>
2PL	<i>bariākkit huōk</i>	<i>kabiākkit huōk</i>	<i>oksuōkkut huōk</i>	<i>diēkkit huōk</i>
3PL	<i>bariāktara huōk</i>	<i>kabiāktara huōk</i>	<i>oksuōktara huōk</i>	<i>diēktara huōk</i>

The functional domains of the probabilitive mood are not very clearly delimited. At least two central functions can be observed. First, the probabilitive mood expresses epistemic modality, whereby the speaker more or less confidently assumes an event to happen. This assumption often seems to be derived from the speaker's experiences and world knowledge that the relevant event usually takes place under given circumstances. In example (379), the fictitious speaker—a bird—explains why it cannot build its nest without covering, namely because otherwise its children would assumingly freeze to death.

- (379) [...] *Ogo-lor-um* *toŋ-u:hu-lar*.
 child-PL-POSS.1SG freeze-PROB-3PL
 ‘[When I live on the top of a willow bush, then it [= the nest] is open.]
 My children will freeze to death then.’
 (ErSV_1964_WarBirdsAnimals_flk.051–052)

Second, the probabilitive mood appears to express inceptive actionality with a slight connotation of necessity. In example (380), the protagonist, the old man Crutch, is starving and about to die. Now it is told that he is about to go to his friend, the old man Butterfly, since that one had helped him already once, and this seems to be the only possibility for the protagonist to survive. However, these connotations surely may be a by-product of the expression of assumption and probability since they cause the speaker to assume that the given event takes place.

- (380) [...] *Epe:t Lörüö-tü-ger* *bar-i:hi*.
 again butterfly-POSS.3SG-DAT/LOC go-PROB.3SG
 ‘[He was lying some days like this, he hardly goes out, starving so, the
 old man Crutch.] He is again about to go to Butterfly.’
 (MiPP_1996_OldManButterfly_flk.048–049)

This discussion leads to the negative forms of the probabilitive mood. Keeping in mind the range of functional domains of the affirmative forms, it is now easy to understand why the negative forms are formally close to negative future forms. Since the probabilitive mood expresses epistemic modality, it stands to reason that the relevant event is not performed yet, giving rise to a future tense interpretation. Apart from this, the negative probabilitive mood exhibits no peculiarities but expresses the speaker’s assumption that some event will not occur.

- (381) “*Kolxoz buōl-am-mit bihigi hatan-îak-pit huō*”, [...]
 kolkhoz be-CVB.SEQ-1PL 1SG.PRO be.able-FUT-1PL NEG
 ‘“We will probably not succeed in becoming a kolkhoz”, [they said].’
 (AnMS_1972_GoodSovietTimes_nar.020)

6.5.7 *Necessitative*

There are three necessitative mood forms in Dolgan, all of them concerned with the expression of deontic modality. More precisely, they express the speaker’s attitude towards an event, which should happen in their opinion. Since the three necessitative mood forms appear to differ mostly formally but

not significantly regarding their functional domains, they are labelled as *necessitative 1*, *necessitative 2* and *necessitative 3*.

6.5.7.1 Necessitative 1

The first necessitative mood is formed with the propriative suffix -LA:K (see Section 12.1), attached to the present participle -Ar ~ -I:r (see Section 6.3.1.1) or the future participle -IAK (see Section 6.3.1.5). Furthermore, the personal endings from set 1 (predicative endings; see Section 6.2) are added. When attached to the present participle, the form of the suffix is -dA:k; when attached to the future participle, the form is -tA:k. Chart 146 and Chart 147 show the forms of the necessitative mood 1 of four verbs, formed with the present and future participle, respectively.

CHART 146 Necessitative mood 1 affirmative, formed with present participle

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dîe-</i> 'say'
1SG	-Ar-dA:k-pIn	<i>bararda:kpîn</i>	<i>kabarda:kpîn</i>	<i>oksordo:kpun</i>	<i>dî:rde:kpîn</i>
2SG	-Ar-dA:k-kIn	<i>bararda:kkîn</i>	<i>kabarda:kkîn</i>	<i>oksordo:kkun</i>	<i>dî:rde:kkîn</i>
3SG	-Ar-dA:k	<i>bararda:k</i>	<i>kabarda:k</i>	<i>oksordo:k</i>	<i>dî:rde:k</i>
1PL	-Ar-dA:k-pIt	<i>bararda:kpît</i>	<i>kabarda:kpît</i>	<i>oksordo:kput</i>	<i>dî:rde:kpît</i>
2PL	-Ar-dA:k-kIt	<i>bararda:kkît</i>	<i>kabarda:kkît</i>	<i>oksordo:kkut</i>	<i>dî:rde:kkît</i>
3PL	-Ar-dA:k-tAr	<i>bararda:ktar</i>	<i>kabarda:ktar</i>	<i>oksordo:ktor</i>	<i>dî:rde:kte</i>

CHART 147 Necessitative mood 1 affirmative, formed with future participle

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dîe-</i> 'say'
1SG	-IAk-tA:k-pIn	<i>barîakta:kpîn</i>	<i>kabîakta:kpîn</i>	<i>oksûokto:kpun</i>	<i>dîekte:kpîn</i>
2SG	-IAk-tA:k-kIn	<i>barîakta:kkîn</i>	<i>kabîakta:kkîn</i>	<i>oksûokto:kkun</i>	<i>dîekte:kkîn</i>
3SG	-IAk-tA:k	<i>barîakta:k</i>	<i>kabîakta:k</i>	<i>oksûokto:k</i>	<i>dîekte:k</i>
1PL	-IAk-tA:k-pIt	<i>barîakta:kpît</i>	<i>kabîakta:kpît</i>	<i>oksûokto:kput</i>	<i>dîekte:kpît</i>
2PL	-IAk-tA:k-kIt	<i>barîakta:kkît</i>	<i>kabîakta:kkît</i>	<i>oksûokto:kkut</i>	<i>dîekte:kkît</i>
3PL	-IAk-tA:k-tAr	<i>barîakta:ktar</i>	<i>kabîakta:ktar</i>	<i>oksûokto:ktor</i>	<i>dîekte:kte</i>

The negated forms of the necessitative mood 1 are formed with the short form of the future participle and the negative existential noun *hūōk*, to which the propriative suffix *-ta:k* as well as the personal endings from set 1 (predicative endings; see Section 6.2) are attached. Chart 148 shows the negative forms of the necessitative mood 1.

CHART 148 Necessitative mood 1 negative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	<i>bariā hūōkta:kpīn</i>	<i>kabiā hūōkta:kpīn</i>	<i>oksūō hūōkta:kpīn</i>	<i>diē hūōkta:kpīn</i>
2SG	<i>bariā hūōkta:kkin</i>	<i>kabiā hūōkta:kkin</i>	<i>oksūō hūōkta:kkin</i>	<i>diē hūōkta:kkin</i>
3SG	<i>bariā hūōkta:k</i>	<i>kabiā hūōkta:k</i>	<i>oksūō hūōkta:k</i>	<i>diē hūōkta:k</i>
1PL	<i>bariā hūōkta:kpīt</i>	<i>kabiā hūōkta:kpīt</i>	<i>oksūō hūōkta:kpīt</i>	<i>diē hūōkta:kpīt</i>
2PL	<i>bariā hūōkta:kkit</i>	<i>kabiā hūōkta:kkit</i>	<i>oksūō hūōkta:kkit</i>	<i>diē hūōkta:kkit</i>
3PL	<i>bariā hūōkta:ktar</i>	<i>kabiā hūōkta:ktar</i>	<i>oksūō hūōkta:ktar</i>	<i>diē hūōkta:ktar</i>

The necessitative mood 1 expresses deontic modality, more precisely, an event that should happen from the speaker's point of view. Since such events are not happening at the moment of speech, the necessitative mood 1 has intrinsic future time reference. The choice of the participle included in the form (present vs future, see above) is irrelevant for the temporal reference and the overall meaning of the form.

- (382) *D'e, min ijit-ar-da:k-pin", diē-bit.*
 well 1SG.PRO ask-PTCP.PRS-NEC-1SG say-PST2.3SG
 "Well, I have to ask [something]", he said.'
 (KiMN_19900417_Milkmaid_flk.105)

- (383) [...] *on-tu-gun emiē imit-iēk-te:k-ter.*
 that-POSS.3SG-POSS.2SG.ACC also soften-PTCP.FUT-NEC-3PL
 '[Then so it becomes real (good) leather, and darkly smoked], they have to soften it as well.'
 (BeES_2010_HidePreparation_nar.032)

When past time reference shall be established, past tense marking and person-number reference is realized at the auxiliary verb *e-*.

- (384) [...], *kambinat-i tur-ūōr-ūōk-ta:k e-ti-lere*
 combine-ACC stand-CAUS-PTCP.FUT-NEC AUX-PST1-3PL
būō, [...].
 EMPH
 ‘[Because the Russians were coming], they had to build up a combine,
 [they were disturbing, right]?’
 (SuON_KuNS_19990303_HardLife_conv.KuNS.018)

Note that in the case of negated forms of the necessitative mood 1, the negation scopes over the main verb. Consequently, it is not expressed that there would be no necessity for the event to happen but that it is not wanted or forbidden that the event happens. Therefore, in example (385), it is stated that the item referred to has to stay clean and not that it does not need to become dirty.

- (385) “*Birtak tūōk da hist-îā hūōk-ta:k, d-ir.*
 dirty what INDF stick-PTCP.FUT NEG-NEC.3SG say-PRS.3SG
 ‘“Nothing dirty should stick there”, he says.’
 *‘“Nothing dirty has to stick there”, he says.’
 (BaRD_1930_DaughterOfUrungAjyy_flk.050)

Finally, the necessitative mood 1 can also be expressed with the auxiliary verb *tus-*, literally meaning ‘fall’. In this case, the future participle of the main verb is combined with the auxiliary, to which the mood suffix and the personal endings are directly attached, like in example (386).

- (386) *Giniler huruk-sut būōl-ūōk tus-ta:k-tar.*
 3PL.PRO writing-AGN become-PTCP.FUT fall.AUX-NEC-3PL
 ‘They [= children] shall become literate.’
 (PoNA_19900810_TripToVoloChanka_nar.026)

As seen from the material discussed above, the forms of the necessitative mood 1 are manifold. According to the material examined here, no crucial differences in their usage can be observed. However, this topic calls definitely for further research.

6.5.7.2 Necessitative 2

The second necessitative form in Dolgan is based on the future participle -IAK (see Section 6.3.1.5) and the particle *na:da* ‘need to; necessary’, which is a loan from Russian *nado* ‘id.’. The necessitative mood 2 has both impersonal and personal forms. The impersonal necessitative mood 2 is formed with the dative-

CHART 149 Necessitative mood 2 affirmative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
	Impersonal form			
	<i>bariākka na:da</i>	<i>kabiākka na:da</i>	<i>oksūōkka na:da</i>	<i>diēkke na:da</i>
	Personal forms			
1SG	<i>bariākpīn na:da</i>	<i>kabiākpīn na:da</i>	<i>oksūōkpūn na:da</i>	<i>diēkpīn na:da</i>
2SG	<i>bariākkīn na:da</i>	<i>kabiākkīn na:da</i>	<i>oksūōkkūn na:da</i>	<i>diēkkīn na:da</i>
3SG	<i>bariāgīn na:da</i>	<i>kabiāgīn na:da</i>	<i>oksūōgūn na:da</i>	<i>diēgīn na:da</i>
1PL	<i>bariākpītīn na:da</i>	<i>kabiākpītīn na:da</i>	<i>oksūōkputūn na:da</i>	<i>diēkpītīn na:da</i>
2PL	<i>bariākkītīn na:da</i>	<i>kabiākkītīn na:da</i>	<i>oksūōkkutūn na:da</i>	<i>diēkkītīn na:da</i>
3PL	<i>bariāktarīn na:da</i>	<i>kabiāktarīn na:da</i>	<i>oksūōktarīn na:da</i>	<i>diēkterīn na:da</i>

CHART 150 Necessitative mood 2 negative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
	Impersonal form			
	<i>barimiākka na:da</i>	<i>kabimiākka na:da</i>	<i>oksumūōkka na:da</i>	<i>diēmiēkke na:da</i>
	Personal forms			
1SG	<i>barimiākpīn na:da</i>	<i>kabimiākpīn na:da</i>	<i>oksumūōkpūn na:da</i>	<i>diēmiēkpīn na:da</i>
2SG	<i>barimiākkīn na:da</i>	<i>kabimiākkīn na:da</i>	<i>oksumūōkkūn na:da</i>	<i>diēmiēkkīn na:da</i>
3SG	<i>barimiāgīn na:da</i>	<i>kabimiāgīn na:da</i>	<i>oksumūōgūn na:da</i>	<i>diēmiēgīn na:da</i>
1PL	<i>barimiākpītīn na:da</i>	<i>kabimiākpītīn na:da</i>	<i>oksumūōkputūn na:da</i>	<i>diēmiēkpītīn na:da</i>
2PL	<i>barimiākkītīn na:da</i>	<i>kabimiākkītīn na:da</i>	<i>oksumūōkkutūn na:da</i>	<i>diēmiēkkītīn na:da</i>
3PL	<i>barimiāktarīn na:da</i>	<i>kabimiāktarīn na:da</i>	<i>oksumūōktarīn na:da</i>	<i>diēmiēkterīn na:da</i>

locative form of the future participle and the particle *na:da*. On the contrary, the possessive accusative form of the future participle and the particle *na:da* form the personal necessitative mood 2. Chart 149 shows the forms of the necessitative mood 2 of four verbs.

The negative forms of the necessitative mood 2 are formed with the negative suffix *-(I)m*, inserted between the verbal stem and the future participle suffix *-IAK*. Otherwise, the forms are the same as in the affirmative paradigm. Chart 150 shows the negative forms of the necessitative mood 2.

The necessitative mood 2 expresses deontic modality, i.e. an event has to happen from the speaker's point of view. The impersonal forms tend to express event-oriented modality. According to Hengeveld (2004: 1193), the speaker considers the realization of the event as necessary because of general knowledge or general rules of conduct without particular reference to the participants of the speech situation. Consequently, in example (387), the speaker states that children generally should learn Dolgan.

- (387) [...], *haka til-i-gar*
 Dolgan language-POSS.3SG-DAT/LOC
ûôret-îek-ke na:da.
 teach-PTCP.FUT-DAT/LOC need.to
 '[And then they tell the children, who have forgotten the language],
 one has to learn Dolgan.'
 (BeEI_KuNS_1998_Teacher_conv.KuNS.046)

The usage of the personal forms of the necessitative mood 2, in turn, often implies a reading of participant-oriented modality. This means that a specific discourse participant must perform the action referred to (Hengeveld 2004: 1192–1193). In example (388), the speaker tells the listening person that the latter has to retell a given story from her own perspective.

- (388) [...], *en beje-ŋ tus-ku-nan*
 2SG.PRO self-POSS.2SG side-POSS.2SG-INS
keps-îek-kin na:da.
 tell-PTCP.FUT-POSS.2SG.ACC need.to
 '[You're happy or not], you have to tell about yourself.'
 (UoPP_ChGS_20170724_SocCogRetell2_nar.ChGS.022)

However, this distinction of event-oriented and participant-oriented deontic modality is a tendency rather than a clear-cut boundary. A relevant counter-example is (389), where the personal form of the second person singular is used, but clearly not the hearer of the utterance is addressed. The interviewer asked what to do when going to the cemetery, and now the informant answered the following sentence. As shown in Section 8.1.1, using second-person singular forms in impersonal clauses is quite common in Dolgan.

- (389) *He, bu taba:k-ta bîrag-îâk-kin na:da.*
 AFF this tobacco-PART throw-PTCP.FUT-POSS.2SG.ACC need.to
 'Yes, one has to throw tobacco [on the grave].'
 (KiPP_2009_Belief_nar.KiPP.102)

As for the negative forms, it can be stated—like in the case of the necessitative mood 1—that the negation scopes over the main verb of the construction and not over the particle *na:da*. This constraint holds for both impersonal and personal constructions. In example (390), it is described how one should behave when being injured or lost in the tundra. Hence, the sentence clearly states how one must not act, not what one does not have to do. In example (391), the speaker points out that it is essential not to become sick, so the reading that one has not to be sick is unfelicitous here.

- (390) *Utuj-um-iŭk-ka* *na:da*.
 fall.asleep-NEG-PTCP.FUT-DAT/LOC need.to
 ‘You must not fall asleep.’ ~
 * ‘You do not have to fall asleep.’
 (AsKS_19XX_Amulet_nar.179)

- (391) [...], *iāld'-im-iāk-kin* *na:da*.
 be.sick-NEG-PTCP.FUT-POSS.2SG.ACC need.to
 ‘[Eh, that's the most important], you must not become sick.’ ~
 * ‘[Eh, that's the most important], you do not have to become sick.’
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.093)

6.5.7.3 Necessitative 3

Besides the two necessitative forms described in the previous sections, Dolgan has one more marginal necessitative form, called necessitative mood 3. It is formed with the future participle -IAK and the existential noun *bar* ‘there is’. According to Ubrjatova (1985: 174) and Artem'ev (2013b: 213), person-number reference is established at the future participle via possessive suffixes, and the possessive suffix of the third person singular -(t)A is attached to the existential noun *bar*. However, the material analyzed here can only partly confirm this pattern. The existential noun *bar* can either remain in its base form or exhibit the third-person singular possessive suffix -(t)A. Moreover, the person-number reference may be established at the existential noun *bar*, whereas the future participle -IAK remains unchanged. Chart 151 shows all variants⁴ of the necessitative mood 3 occurring in the material at hand. Negative forms of the necessitative mood 3 do not appear in the analyzed material, nor are they mentioned in the existing grammatical descriptions.

4 Theoretically, though not occurring in the material, also the long possessive forms of the future participle (see Section 6.3.1.5) are possible here. Due to limits of space, they are not mentioned in Chart 151.

CHART 151 Necessitative mood 3 affirmative

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>diē-</i> ‘say’
1SG	<i>bariām bar(a) ~</i> <i>bariāk bar:rim</i>	<i>kabiām bar(a) ~</i> <i>kabiāk bar:rim</i>	<i>oksūōm bar(a) ~</i> <i>oksūōk bar:rim</i>	<i>diēm bar(a) ~</i> <i>diēk bar:rim</i>
2SG	<i>bariāŋ bar(a) ~</i> <i>bariāk bar:riŋ</i>	<i>kabiāŋ bar(a) ~</i> <i>kabiāk bar:riŋ</i>	<i>oksūōŋ bar(a) ~</i> <i>oksūōk bar:riŋ</i>	<i>diēŋ bar(a) ~</i> <i>diēk bar:riŋ</i>
3SG	<i>bariā bar(a) ~</i> <i>bariāk ba:ra</i>	<i>kabiā bar(a) ~</i> <i>kabiāk ba:ra</i>	<i>oksūō bar(a) ~</i> <i>oksūōk ba:ra</i>	<i>diē bar(a) ~</i> <i>diēk ba:ra</i>
1PL	<i>bariākp̄it bar(a) ~</i> <i>bariāk bar:bit</i>	<i>kabiākp̄it bar(a) ~</i> <i>kabiāk bar:bit</i>	<i>oksūōkp̄ut bar(a) ~</i> <i>oksūōk bar:bit</i>	<i>diēkp̄it bar(a) ~</i> <i>diēk bar:bit</i>
2PL	<i>bariākk̄it bar(a) ~</i> <i>bariāk ba:rgit</i>	<i>kabiākk̄it bar(a) ~</i> <i>kabiāk ba:rgit</i>	<i>oksūōkk̄ut bar(a) ~</i> <i>oksūōk ba:rgit</i>	<i>diēkk̄it bar(a) ~</i> <i>diēk ba:rgit</i>
3PL	<i>bariāktara bar(a) ~</i> <i>bariāk ba:llara</i>	<i>kabiāktara bar(a) ~</i> <i>kabiāk ba:llara</i>	<i>oksūōktara bar(a) ~</i> <i>oksūōk ba:llara</i>	<i>diēkt̄ere bar(a) ~</i> <i>diēk ba:llara</i>

The necessitative mood 3 can express deontic participant-oriented modality like the necessitative moods 1 and 2.

- (392) [...], *h-iek-pit* *bar-a*, *onno:gor*
eat-PTCP.FUT-POSS.1PL EX-POSS.3SG even
okt-on *öl-lök-pütüne* *kenni-biti-ger*
hunger-CVB.SEQ die-COND-1PL back-POSS.1PL-DAT/LOC
ka:l-iāg-a.
stay-FUT-3SG
‘[We will go, we have a single horse], we should even eat it, if we die of
hunger, it will outlive us.’
(BaA_1930_OldManOldWoman_flk.012)

However, there are also contexts where the necessitative mood 3 seems to be used in hortative or potential contexts.

- (393) *Ohok ott-o* *o:nn’-ūōk-put* *bar-a*.
stove heat-CVB.SIM play-PTCP.FUT-POSS.1PL EX-POSS.3SG
‘We could play to heat the stove.’ ~
‘Let’s play to heat the stove.’
(BeAM_199X_LegendSpiritOfTrees_nar.071)

Finally, it should be said that the form is relatively infrequent (six tokens) in the material analyzed here. Therefore, more research on its functions and possible negative forms is highly desired.

6.5.8 *Intentional*

The intentional is formed based on the long form of the future participle -IAK (see Section 6.3.1.5). Its person-number forms are pretty opaque, and exact cognates cannot be found in other Turkic languages, not even in Sakha. From my point of view, it seems most plausible to assume that the third-person forms are a combination of the future participle and the third-person imperative forms -TIn (singular) and -TInnAr (plural) (see Section 6.5.9). The first- and second-person forms could then be explained as amalgamations of the third-person imperative form -TIn and the respective personal ending from set 1 (predicative endings; see Section 6.2). Another possible analysis would be the combination of the future participle -IAK, the simple past tense marker -TI and personal endings. However, in this case, it would be surprising that the personal endings from set 1 would be attached to the simple past tense marker, where usually the personal endings from set 2 are used (see Section 6.4.2.1). Regardless of the diachronic development, Chart 152 shows the affirmative paradigm of four verbs of the intentional.

CHART 152 Intentional affirmative

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>diē-</i> ‘say’
1SG	-IAk-tI-bIn	<i>bariāktibin</i>	<i>kabiāktibin</i>	<i>oksūōktubun</i>	<i>diēktibin</i>
2SG	-IAk-tI-gIn	<i>bariāktigin</i>	<i>kabiāktigin</i>	<i>oksūōktugun</i>	<i>diēktigin</i>
3SG	-IAk-tIn	<i>bariāktin</i>	<i>kabiāktin</i>	<i>oksūōktun</i>	<i>diēktin</i>
1PL	-IAk-tI-bIt	<i>bariāktibit</i>	<i>kabiāktibit</i>	<i>oksūōktubut</i>	<i>diēktibit</i>
2PL	-IAk-tI-gIt	<i>bariāktigit</i>	<i>kabiāktigit</i>	<i>oksūōktugut</i>	<i>diēktigit</i>
3PL	-IAk-tInnAr	<i>bariāktinnar</i>	<i>kabiāktinnar</i>	<i>oksūōktunnar</i>	<i>diēktinner</i>

According to the existing grammars of Dolgan, the intentional is negated with the negative suffix -(I)m (Ubrjatova 1985: 182; Artem’ev 2013b: 206). In the analyzed material here, no instances of the negative intentional could be found. For completeness, the paradigm is nevertheless given and shown in Chart 153.

The function of the intentional appears to be describing an event whose accomplishment is desirable from the speaker’s point of view. Thereby, the

CHART 153 Intentional negative

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>diē-</i> ‘say’
1SG	-(I)m-IAk-tl-bIn	<i>barimiâktibin</i>	<i>kabimiâktibin</i>	<i>oksumûôktubun</i>	<i>diēmiêktibin</i>
2SG	-(I)m-IAk-tl-gIn	<i>barimiâktigin</i>	<i>kabimiâktigin</i>	<i>oksumûôktugun</i>	<i>diēmiêktigin</i>
3SG	-(I)m-IAk-tIn	<i>barimiâktin</i>	<i>kabimiâktin</i>	<i>oksumûôktun</i>	<i>diēmiêktin</i>
1PL	-(I)m-IAk-tl-bIt	<i>barimiâktibit</i>	<i>kabimiâktibit</i>	<i>oksumûôktubut</i>	<i>diēmiêktibit</i>
2PL	-(I)m-IAk-tl-gIt	<i>barimiâktigit</i>	<i>kabimiâktigit</i>	<i>oksumûôktugut</i>	<i>diēmiêktigit</i>
3PL	-(I)m-IAk-tInnAr	<i>barimiâktinnar</i>	<i>kabimiâktinnar</i>	<i>oksumûôktunnar</i>	<i>diēmiêktinner</i>

speaker’s focus lies on the expected result of the event rather than the event itself. In the first person, the emerging forms stand closely to (ad)hortative forms, and in the second and third person, the forms are functionally close to imperative forms. So it is not surprising that Ubrjatova (1985: 178–183) discusses the forms together with other imperative forms. Nevertheless, it seems to be the case that the core meaning of the form is still a modal one related to volition, expressing the desired accomplishment of an event in the future, and not imperative illocution.

- (394) [...] *“D’e, biē-îēkti-bin.”*
 well give-INTL.1SG
 ‘[“If you give me [that], I will release you at once!”]—“Well, I’ll give it to you. [= It will be at your disposal.]”’
 (ErSV_1964_WarBirdsAnimals_flk.395–396)

- (395) [...] *Onno uôl-uj kel-îēktin.*
 there son-POSS.2SG come-INTL.3SG
 ‘[Tomorrow is my birthday.] Then your son should come. [= Then your son should be here.]’
 (ChuAE_1968_Lyppyrdaan_flk.041–042)

However, it must be mentioned that the intentional seldom occurs in the analyzed material. Therefore, its exact functions remain unclear to a certain extent and call for further research.

6.5.9 Imperative

The imperative mood in Dolgan has a complex paradigm without a single morpheme indicating the imperative mood itself. Additionally, there is a first-person dual form; see below for its functions and discrimination against first-person plural. Chart 154 shows the personal endings in the imperative mood as a first overview.

CHART 154 Imperative personal endings

1SG	-I:m
2SG	-Ø
3SG	-TIn
1DU	-IAk
1PL	-IAgIn
2PL	-(I)ŋ
3PL	-TInnAr

The “prototypical” second-person imperative forms are straightforward to analyze. In the second person singular, there is a zero ending. In the second person plural, the ending is -(I)ŋ. The vowel-initial allomorphs (-iŋ, -iŋ, -uŋ, -üŋ) are attached to consonant stems, whereas -ŋ is attached to vowel stems. In the former case, morphonological processes like intervocalic voicing, the debuccalization *s* > *h* and vowel syncope in polysyllabic stems apply.

The third-person forms of the imperative are -TIn and -TInnAr, whereby the third-person plural form combines the third-person singular form and the plural marker -LAr. When attached to vowel stems, the forms -tIn and -tInnAr are used. In the case of consonant stems, the suffix-initial consonant assimilates to the stem-final consonant: It is *t* when attached to voiceless consonants, *d* when attached to voiced non-nasal, non-lateral consonants, *n* when attached to nasal consonants and *l* when attached to *l*. Note that metathesis in polysyllabic stems does not apply here, cf. the form *ogus-tun* < *ogus-* ‘beat’ (unlike in, e.g. *oksu-but* ‘beat-PTCP.PST’). Chart 155 summarizes the allomorphs of the third-person imperative suffixes.

The first-person forms are most complex. The first-person singular form is -I:m, which is directly attached to consonant stems, causing the usual morphonological processes. When attached to vowel and diphthong stems, the stem-final vowel or diphthong, respectively, is deleted. The form of the first person dual is -IAk, and the form of the first person plural is -IAgIn. The latter is a

CHART 155 Allomorphs of the third-person imperative suffixes

Preceding environment	Allomorphs	
	Third person singular	Third person plural
V, C _{-voice}	<i>-tin, -tin, -tun, -tün</i>	<i>-tinnar, -tinner, -tunnar, -tünner</i>
C _{+voice, -nas, -lat}	<i>-din, -din, -dun, -dün</i>	<i>-dinnar, -dinner, -dunnar, -dünner</i>
C _{+voice, +nas}	<i>-nin, -nin, -nun, -nün</i>	<i>-ninnar, -ninner, -nunnar, -nünner</i>
C _{+voice, +lat}	<i>-lin, -lin, -lun, -lün</i>	<i>-linnar, -linner, -lunnar, -lünner</i>

combination of -IAk and the second-person plural imperative form -(I)ŋ (see Nevskaya (2005: 348) for the same form in Sakha). Both forms behave morphologically similarly. When being attached to consonant stems, they cause the usual morphonological processes like intervocalic voicing, the debuccalization *s* > *h* and vowel syncope in polysyllabic stems. When attached to vowel and diphthong stems, the stem-final vowel or diphthong, respectively, is deleted. Chart 156 shows the imperative forms of four verbs.

The negation of the imperative forms is not uniform either. The suffix -(I)m appears in the first person, -(I)mA in the second person, and -BA in the third person. The former two suffixes exhibit vowel-initial allomorphs after consonant stems, but are *-m* and *-mA*, respectively, after vowel stems. The suffix -BA is directly attached to both vowel and consonant stems. When the stem ends with a vowel or a voiced non-nasal consonant, the suffix-initial vowel is *b*. When the stem-final consonant is voiceless, it is *p*, and when the stem-final consonant is a nasal, it is *m*. Chart 157 shows the negative personal endings in the imperative mood. Chart 158 shows the negative imperative forms of four verbs.

As for the functional domain expressed, imperatives are linguistic expressions of directive illocutionary acts (Searle 1975: 355). Thus, imperatives correlate to orders or requests. Undoubtedly, placing an order is most often an issue between speaker and hearer, so the most frequent domain of the imperative is the second person. Example (396) to (399) show prototypical instances of the imperative in the second person.

CHART 156 Imperative affirmative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dīe-</i> 'say'
1SG	<i>bari:m</i>	<i>kabi:m</i>	<i>oksu:m</i>	<i>atili:m</i> ^a
2SG	<i>bar</i>	<i>kap</i>	<i>ogus</i>	<i>dīe</i>
3SG	<i>bardi:n</i>	<i>kapti:n</i>	<i>ogustun</i>	<i>dīeti:n</i>
1DU	<i>bariāk</i>	<i>kabiāk</i>	<i>oksūōk</i>	<i>dīēk</i>
1PL	<i>bariāgiṇ</i>	<i>kabiāgiṇ</i>	<i>oksūōguṇ</i>	<i>dīēgiṇ</i>
2PL	<i>bariṇ</i>	<i>kabiṇ</i>	<i>oksun</i>	<i>dīēṇ</i>
3PL	<i>bardi:nna:r</i>	<i>kapti:nna:r</i>	<i>ogustunna:r</i>	<i>dīeti:nna:r</i>

- a Since there are no instances of the verb *dīe-* 'say' in the INEL Dolgan Corpus, instead the form of *atila:-* 'sell' is given here. Expectedly, the forms of *dīe-* would be *di:m*.

CHART 157 Negative imperative personal endings

1SG	-(I)m-I:m
2SG	-(I)mA-Ø
3SG	-BA-tIn
1DU	-(I)m-IAk
1PL	-(I)m-IAgIṇ
2PL	-(I)mA-ṇ
3PL	-BA-tInna:r

CHART 158 Imperative negative

	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>dīe-</i> 'say'
1SG	<i>barimi:m</i>	<i>kabimi:m</i>	<i>oksumu:m</i>	<i>dīemi:m</i>
2SG	<i>barima</i>	<i>kabima</i>	<i>oksuma</i>	<i>dīeme</i>
3SG	<i>barbatin</i>	<i>kappatin</i>	<i>oksubatin</i>	<i>dīebetin</i>
1DU	<i>barimiāk</i>	<i>kabimiāk</i>	<i>oksumūōk</i>	<i>dīemiēk</i>
1PL	<i>barimiāgiṇ</i>	<i>kabimiāgiṇ</i>	<i>oksumūōguṇ</i>	<i>dīemiēgiṇ</i>
2PL	<i>barimaṇ</i>	<i>kabimaṇ</i>	<i>oksumaṇ</i>	<i>dīemeṇ</i>
3PL	<i>barbatinna:r</i>	<i>kappatinna:r</i>	<i>oksubatinna:r</i>	<i>dīebetinna:r</i>

- (396) *“Min ki:s-pin d’aktar gin”,*
 1SG.PRO daughter-POSS.1SG.ACC woman make.IMP.2SG
d-ir.
 say-PRS.3SG
 ‘“Marry my daughter”, he says.’
 (ChuAE_1968_Lyppyrdaan_flk.056)
- (397) *E, ira:k bar-ima, tial-ga kir-ime.*
 eh far.away go-NEG.IMP.2SG wind-DAT/LOC go.in-NEG.IMP.2SG
 ‘Eh, don’t go far away, don’t go [i.e. row] into the wind.’
 (KiMN_19900417_Milkmaid_flk.051)
- (398) *Hahil-ij diē-t-e: “Čej, kitil-ga*
 fox-POSS.2SG say-PST1-3SG hey shore-DAT/LOC
tiks-ij!”
 come.closer-IMP.2PL
 ‘The fox said: “Hey, come closer to the shore!”’
 (FeA_1931_OldWomanFoxFur_flk.007)
- (399) *O-nu “bar-ima-ŋ” d-i-bin, isti-bet-ter buō.*
 that-ACC go-NEG-IMP.2PL say-PRS-1SG hear-NEG.PRS-3PL EMPH
 ‘I say “don’t go” on that, but they do not listen.’
 (KiPP_2009_Belief_nar.KiPP.095)

Nevertheless, as can be seen from the charts above, Dolgan exhibits also imperative forms of the first and third person. Following i.a. Gusev (2013: 28–29), I also regard first- and third-person forms as genuine imperatives and not as optatives, hortatives, adhortatives (first person) or jussives (third person). Examples (400) and (401) show imperatives of the first and third person.

- (400) *Min en’iē-ke as-ta bier-im.*
 1SG.PRO 2SG.PRO-DAT/LOC food-PART give-IMP.1SG
 ‘Let me give you food then.’
 (MiAI_1964_OldPeasantOldWoman_flk.013)
- (401) *Onton ira:kta:gi balik-t-i: bar-din.*
 then czar fish-VBZ-CVB.SIM go-IMP.3SG
 ‘Then the czar shall go fishing.’
 (ChPK_1970_ThreeBoys_flk.021)

As mentioned above, Dolgan has two first-person non-singular imperative forms, namely -IAk and -IAgIŋ. The distinction of the functions of these forms in both Dolgan and Sakha had been an issue of debate for some time (see, e.g. Korkina 1970 and Nevskaya 2005). Däbritz (2019a) could show that the crucial distinction of the forms is the distinction of number, i.e. dual vs plural. In most cases, however, this coincides with the distinction of minimal (speaker and addressee) and augmented inclusion (speaker, addressee(s) and other persons) (see Dobrushina & Goussev 2005 for details). In example (402), the context is as follows: Two girls are going for water. One of them stumbles over the legs of the main protagonist. They start talking, and it becomes clear that the girl's father made a riddle. Who solves the riddle can marry the girl. Now the girl tells the protagonist what the solution to the riddle is. From the following context, it becomes clear that not the protagonist and the girl are going away now, but the girl and her friend. Hence, the speaker refers to exactly two people, excluding the addressee. In example (403), people are fishing with a seine. One man, Nojoon, is standing at the shore and is holding one end of the seine. The other people are in a boat and are pulling the seine to surround a school of fish. Now one of the people in the boat is waving to Nojoon and shouting something. Here, the speaker refers to more than two people, excluding the addressee. The difference between the forms -IAk (402) and -IAgIŋ (403) thus lies in the number of referents.

- (402) *Iti-ni gin-ar e-bit-e du, če, bar-îāk.*
 that-ACC make-PTCP.PRS AUX-PST2-3SG MOD well go-IMP.IDU
 'Apparently, that is what he means, well, let us [two] go.'
 (BeVP_1970_Laajku_flk.056–057)

- (403) *Türgen-nik ka:m-îagiŋ, tard-a*
 quick-ADVZ walk-IMP.IPL pull-CVB.SIM
tüh-e-tüh-e.
 fall.AUX-CVB.SIM-fall.AUX-CVB.SIM
 'Let's go quickly in order to pull.'
 (PoNA_19910207_Fishing_nar.184)

6.5.10 Future Imperative

Besides the forms described in Section 6.5.9, there are imperative forms in Dolgan most often referred to as *future imperative* (Ubrjatova 1985: 179; Li 2011: 150; Artem'ev 2013b: 207–208). The marker of the future imperative is -A:r, which is directly attached to all types of verbal stems. When attached to consonant stems, the usual morphonological processes (intervocalic voicing, the debuc-

calization *s > h* and vowel syncope in polysyllabic stems) apply. When attached to vowel and diphthong stems, the suffix vowel is deleted. The future imperative is used only in the second person, and the person-number endings are -Ø and -Iŋ. The negation is formed with the suffix -(I)m. Chart 159 shows the endings of the future imperative. Chart 160 shows the future imperative forms of four verbs.

CHART 159 Future imperative personal endings

	Affirmative	Negative
2SG	-A:r-Ø	-(I)m-A:r-Ø
2PL	-A:r-Iŋ	-(I)m-A:r-Iŋ

CHART 160 Future imperative

	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
	Affirmative			
2SG	<i>bara:r</i>	<i>kaba:r</i>	<i>okso:r</i>	<i>dîer</i>
2PL	<i>bara:rîŋ</i>	<i>kaba:rîŋ</i>	<i>okso:ruŋ</i>	<i>dîerîŋ</i>
	Negative			
2SG	<i>barîma:r</i>	<i>kabîma:r</i>	<i>oksuma:r</i>	<i>dîeme:r</i>
2PL	<i>barîma:rîŋ</i>	<i>kabîma:rîŋ</i>	<i>oksuma:rîŋ</i>	<i>dîeme:rîŋ</i>

The functions of the future imperative are not fully clear. Like the imperative forms described in Section 6.5.9, they are linguistic expressions of directive illocutionary acts. Since directive illocutionary acts already convey future reference by their semantics (Searle 1975: 355), the future time reference is not the decisive distinguishing criterion of both imperative forms. The future imperative forms are most often used when the given event shall happen after another event has happened (404) or in dependence on another event (405).

- (404) *Min taksi-bit-im kenne ki:s-ka-r*
 1SG.PRO go.out-PTCP.PST-POSS.1SG after girl-POSS.2SG-DAT/LOC
bar-a:r.
go-FUT.IMP.2SG
 'After I have gone out, go to the girl.'
 (BeVP_1970_BaldheadedOrphanBoy_flk.039)
- (405) *Bier-deg-ine agaj min'igi-n kepse:-r.*
 give-COND-3SG only 1SG.PRO-ACC **tell-FUT.IMP.2SG**
 'Only if he gives [it to you], tell about me.'
 (ErSV_1964_WarBirdsAnimals_flk.289)

Moreover, example (406) shows that the future imperative forms also refer to a time farther away in the future. The first clause refers to a time right after the moment of speech, and the usual imperative form is used. In contrast, the second clause refers to the following day, and the future imperative form is used.

- (406) *Če bar-iŋ d'ie-giti-ger, harsierda erde*
 well go-IMP.2PL home-POSS.2PL-DAT/LOC tomorrow early
kel-e:r-iŋ.
come-FUT.IMP-2PL
 'Well, go home [now], come tomorrow early.'
 (MiAI_1964_OldPeasantOldWoman_flk.098)

Negative forms of the future imperative are not attested in the analyzed material but named in all grammatical descriptions. However, due to the lack of forms in the corpus, it can only cautiously be stipulated that their use is not expected to be restricted by any semantic constraints.

6.5.11 *Potential-Admonitive Mood*

The potential-admonitive mood in Dolgan is complex in both form and function. It is formed with the suffix -A:jA, to which the personal endings from set 1 (predicative endings; see Section 6.2) are attached. The suffix is directly attached to consonant stems, causing the usual morphonological processes (intervocalic voicing, the debuccalization *s* > *h* and vowel syncope in polysyllabic stems). When attached to vowel and diphthong stems, the suffix-initial vowel is deleted. The forms of the third person are exceptional: In the zero-marked third person singular, the suffix -A:rAj is used; in the third person plural, the suffix -A:jAr occurs, whereby the suffix-final *r* is assimilated to *l* before the

CHART 161 Potential-admonitive mood affirmative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	-A:jA-bIn	<i>bara:jabin</i>	<i>kaba:jabin</i>	<i>okso:jobun</i>	<i>diējebin</i>
2SG	-A:jA-gIn	<i>bara:jagin</i>	<i>kaba:jagin</i>	<i>okso:jogun</i>	<i>diējegin</i>
3SG	-A:rAj	<i>bara:raj</i>	<i>kaba:raj</i>	<i>okso:roj</i>	<i>diērej</i>
1PL	-A:jA-bIt	<i>bara:jabit</i>	<i>kaba:jabit</i>	<i>okso:jobut</i>	<i>diējebit</i>
2PL	-A:jA-gIt	<i>bara:jagit</i>	<i>kaba:jagit</i>	<i>okso:jogut</i>	<i>diējegit</i>
3PL	-A:jAl-lAr	<i>bara:jallar</i>	<i>kaba:jallar</i>	<i>okso:jollor</i>	<i>diējeller</i>

CHART 162 Potential-admonitive mood negative

	Morpheme breaks	<i>bar-</i> 'go'	<i>kap-</i> 'catch'	<i>ogus-</i> 'beat'	<i>diē-</i> 'say'
1SG	-(I)m-A:jA-bIn	<i>barima:jabin</i>	<i>kabima:jabin</i>	<i>oksuma:jabin</i>	<i>diēme:jebin</i>
2SG	-(I)m-A:jA-gIn	<i>barima:jagin</i>	<i>kabima:jagin</i>	<i>oksuma:jagin</i>	<i>diēme:jegin</i>
3SG	-(I)m-A:rAj	<i>barima:raj</i>	<i>kabima:raj</i>	<i>oksuma:raj</i>	<i>diēme:rej</i>
1PL	-(I)m-A:jA-bIt	<i>barima:jabit</i>	<i>kabima:jabit</i>	<i>oksuma:jabit</i>	<i>diēme:jebit</i>
2PL	-(I)m-A:jA-gIt	<i>barima:jagit</i>	<i>kabima:jagit</i>	<i>oksuma:jagit</i>	<i>diēme:jegit</i>
3PL	-(I)m-A:jAl-lAr	<i>barima:jallar</i>	<i>kabima:jallar</i>	<i>oksuma:jallar</i>	<i>diēme:jeller</i>

third-person plural suffix -lAr. Possible diachronic explanations for this irregularity are not available at the moment, but hopefully, further research can shed light on them. Chart 161 shows the affirmative forms of the potential-admonitive mood of four verbs in Dolgan.

Negative forms of the potential-admonitive mood are not attested in the material analyzed here. But as they are described to exist in the existing grammatical descriptions, they are provided here, too. The negative forms of the potential-admonitive mood are formed with the negative suffix -(I)m, which is inserted before the mood marker (Ubrjatova 1985: 184; Artem'ev 2013b: 212). Chart 162 shows the negative forms of the potential-admonitive mood.

The functions of the potential-admonitive mood are manifold and not fully understood yet. According to Artem'ev (2013b: 212), it expresses the possibility of an event in a neutral or desired aspect.

- (407) *Min universitet-ka kir-e:je-bin.*
 1SG.PRO university-DAT/LOC enter-POT-1SG
 ‘Possibly, I enter the university.’
 (Artem’ev 2013b: 212; own glossing)

In the material analyzed here, the expression of the desired possibility could not be observed. Only one single instance of the neutral expression of possibility could be detected.

- (408) *Kihie-ke kütüre:tek-ke kuhagan*
 human-DAT/LOC suspect-PTCP.COND-DAT/LOC bad
büöl-a:raj.
 be-POT.3SG
 ‘It could be bad to suspect the man.’
 (SaSS_1964_NganasanBraveBoy_flk.069)

In either case, this function appears to be restricted to the first and third persons. In second-person contexts, which are significantly more frequent, the potential-admonitive mood expresses warnings or, even stronger, prohibitions. This functional domain is mentioned by Artem’ev (2013b: 212) and occurs regularly in the material analyzed here. In example (409), the speaker warns his addressee that the latter might be afraid, when he is lifted up by a magic kerchief; in this case, the addressee cannot control the given event. Example (410), in turn, displays a prohibition since the named children can control whether they go the sledge or not.⁵

- (409) *Kuttan-a:ja-gin – kalla:n diekki kötüt-teg-ine*
 be.afraid-ADM-2SG sky towards raise-TEMP-3SG
d’ie-gin bul-uō-η.
 house-POSS.2SG.ACC find-FUT-2SG
 ‘Don’t be afraid—when it lifts you up, you will find [the way] home.’
 (ErSV_1964_WarBirdsAnimals_flk.482)
- (410) *Ogo-lo:r, min hirga-ba-r čugaha:ja-git!*
 child-PL 1SG.PRO sledge-POSS.1SG-DAT/LOC come.closer-ADM-2PL
 ‘Children, don’t go to my sledge!’
 (PoS_PrG_1964_Kaamyylaak_flk.036)

5 See also Gusev (2013: Ch. 1.3.3.2) for a cross-linguistic discussion of controlled and non-controlled events in the context of imperatives.

The semantics of the potential and the admonitive readings of the described form seem to differ significantly at first glance. Nevertheless, there exists a connection. An event, which potentially happens, often entails some consequences. So, if a participant of the speech situation decides upon a potential event, they decide upon possible effects, too. This circumstance makes the form prone to a reading that focuses on possible consequences, which, in turn, is semantically quite close to warnings or even prohibitions. This semantic development can be schematized as follows.

potential event > potential event with consequences > warning of the participant > participant's influence of the realization of the event > prohibition

Pakendorf & Schalley's (2007) similar analysis of the cognate Sakha forms (in their terminology: voluntative-potential) can be transferred to Dolgan as well. Initially, the potential-admonitive mood describes possible events, i.e. it expresses epistemic modality; this function is retained in the first and third persons. In a second and third step, the form warns the addressee of an undesired, non-controlled event (409), and forbids the addressee to perform an action undesired for the speaker, i.e. a controlled event (410).

This grammaticalization process also explains why, on the one hand, negative forms of the potential-admonitive mood do not occur and why, on the other hand, the second person is the most important domain of the form (Pakendorf & Schalley 2007: 525–531).

6.6 Evidentiality

Evidentiality is a linguistic category that has many interfaces with modality. Therefore, evidentiality is often analyzed as a subcategory of the latter (e.g. by Hengeveld 2004). However, many approaches (e.g. Plungian 2001, Aikhenvald 2006) argue that evidentiality has to be kept strictly apart from modality, although there may be formal and functional overlaps. Following the latter approaches here, I assume that modality concerns the speaker's evaluation of an event. In contrast, evidentiality concerns the speaker's source for a piece of information about an event. Evidentiality can be divided into direct evidentiality (e.g. visual, sensory evidence) and indirect evidentiality (e.g. inference, reasoning, quotation) (Plungian 2001: 352–353). Johanson (2018) argues that the marking of evidentiality in Turkic languages is not very elaborated and that only indirect evidentiality can be expressed. Dolgan forms no exception in this

respect—in what follows, *evidentiality*, thus, means *indirect evidentiality*. Formally, Dolgan has no homogenous category expressing evidentiality, but various items play a role. The only designated evidential form is the inferential formed with -TAK, described in Section 6.6.1. Further expressions of evidentiality are always concomitant to other morphological forms and semantic meanings, which is discussed in Section 6.6.2.

6.6.1 Inferential

The inferential is based on the conditional participle -TAK (see Section 6.3.1.7), which is attached to the verbal stem, whereby the usual morphonological processes apply. However, polysyllabic stems with a volative vowel do not exhibit metathesis. To the form, the personal endings from set 2 (possessive endings; see Section 6.2) are attached. In the singular forms, this leads to the voicing of the suffix-final consonant (*k > g*); in the plural forms, consonant assimilations occur at the morpheme boundary. Chart 163 shows the forms of the inferential in Dolgan.

CHART 163 Inferential

	Morpheme breaks	<i>bar-</i> ‘go’	<i>kap-</i> ‘catch’	<i>ogus-</i> ‘beat’	<i>dîe-</i> ‘say’
1SG	-TAg-Im	<i>bardagim</i>	<i>kaptagim</i>	<i>ogustagim</i>	<i>dîetegim</i>
2SG	-TAg-Iḡ	<i>bardagiḡ</i>	<i>kaptagiḡ</i>	<i>ogustagiḡ</i>	<i>dîetegiḡ</i>
3SG	-TAg-A	<i>bardaga</i>	<i>kaptaga</i>	<i>ogustaga</i>	<i>dîetege</i>
1PL	-TAK-pIt	<i>bardakpit</i>	<i>kaptakpit</i>	<i>ogustakpit</i>	<i>dîetekpit</i>
2PL	-TAK-kIt	<i>bardakkit</i>	<i>kaptakkit</i>	<i>ogustakkit</i>	<i>dîetekkit</i>
3PL	-TAK-tArA	<i>bardaktara</i>	<i>kaptaktara</i>	<i>ogustaktara</i>	<i>dîetektere</i>

Negative forms of the inferential appear to be absent in Dolgan, both in the INEL Dolgan Corpus and in existing grammatical descriptions. Expectedly, the negative forms would contain the negative suffix -BA, the conditional participle -TAK and the personal endings from set 2 (possessive endings) since the conditional participle is negated with the suffix -BA. However, the emerging forms—e.g. *barbatagim*, *barbatagiḡ* etc.—are used for expressing the negation of the postterminal non-evidential past (see Section 6.4.2.2). Seemingly, no substitute forms expressing the negative inferential have developed in Dolgan.

From a functional perspective, the inferential expresses indirect evidentiality. More precisely, it expresses that the speaker infers the given information

from the situational circumstances. Hearsay information or quotation is not described with this form. In example (411), the speaker talks about when she was a member of the Komsomol. She says that her supervisor already had signed her relocation when he told her she should work in a specific settlement. Thus, it can be inferred from this circumstance that she indeed went since not following the order was, in fact, impossible. In example (412), an old couple discovered a young man lying beneath their daughter in the tent. Consequently, they infer that the man will marry her and become their son-in-law.

(411) *Bar-in-nag-im.*

go-MID-INFR-1SG

‘So I went apparently.’

(AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.040)

(412) *E: d'e, kütüöp-püt būol-lag-ij.*

eh well son.in.law-POSS.1PL **become-INFR-POSS.2SG**

‘Well, you are apparently our son-in-law.’

(YaP_1930_GroomFromUpperWorld_flk.010)

6.6.2 *Other Forms Expressing Evidentiality*

Apart from the inferential described in Section 6.6.1, one tense-aspect form and a range of particles evoke evidential readings. As stated in Section 6.4.2, the postterminal evidential past tense is positively marked for evidentiality in Dolgan. This tense-aspect form has evidential implications, expressing that the speaker did not witness the described event themselves. In example (413), the speaker retells a story she has seen in pictures: A man told a friend that the latter's wife is betraying him. Now, the betrayed husband confronts his wife with the accusations. As is visible, the text-internal speaker (the husband) indicates his source of information by using the postterminal evidential past. Moreover, this is an instance of indirect evidentiality via mediation (quotation) in the sense of Plungian (2001). In example (414), a man tells his czar that he met a person and says he does not know who this person was. After he has described the person in question, the czar knows who is meant and, thus, infers to whom the man had gone. Hence, this is an instance of indirect evidentiality via inference.

- (413) *D'e kanna ere kör-büt, kepset-e tur-buk-kun*
 well where INDF see-PST2.3SG chat-CVB.SIM stand.AUX-PST2-2SG
kül-e tur-buk-kun, d-ir.
 laugh-CVB.SIM stand.AUX-PST2-2SG say-PRS.3SG
 'Somewhere he has seen [you], you were chatting and laughing, he says.'
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.200)
- (414) *E, iti A:t bukatir-ga tij-bik-kin.*
 eh that Aat hero-DAT/LOC reach-PST2-2SG
 'Ah, you came apparently to the hero Aat.'
 (ErSV_1964_WarBirdsAnimals_flk.410)

In non-verbal predications (see Section 8.2), the copula verb *e-* is used, likewise transmitting evidential implications.

- (415) *Bu aya:r karak-ta:k-tar elbek bagaji noruôt e-bit-ter.*
 this half eye-PROPR-PL many very people be-PST2-3PL
 'These one-eyed [people] were apparently a very numerous people.'
 (BaA_1930_OneEyedGirl_flk.027)
- (416) *Öksökü dojdu-ta irak e-bit.*
 Öksökü land-POSS.3SG distant be-PST2.3SG
 '[It turned out] that Öksökü's land is apparently far away.'
 (ErSV_1964_WarBirdsAnimals_flk.116)

In the latter example, there is the third-person singular form *ebit*. This form has partly been grammaticalized into an evidential particle, as mentioned in Section 3.8. Two pieces of evidence can be provided for this. On the one hand, *ebit* can be combined with complete and finite verb forms, thus, in contexts where it is superfluous from the perspective of tense-aspect and person-number marking. On the other hand, the form can even be shortened to *et*, so that its original tense-aspect and person-number marking are not visible anymore. The following two examples show these peculiarities. For comprehensiveness, the evidential particle is glossed with EVID in this grammar, where applicable.

- (417) *Kihin-i meld'i utuj-bup-pun ebit.*
 winter-ACC whole sleep-PST2-1SG EVID
 'I slept the whole winter, apparently.'
 (AkEE_19XX_BoySister_flk.156)

- (418) *On-tu-ŋ* *da* *haŋa-tin*
 that-POSS.3SG-POSS.2SG EMPH language-POSS.3SG.ACC
tūōlkul-ala:ččī-ta *hūōk* *e:t* [...].
 understand-ITER-PTCP.HAB-POSS.3SG NEG.3SG EVID
 ‘One does not understand his language apparently, [he just talks, he does not speak Dolgan cleanly].’
 (ELBK_KuNS_2004_Storytellers_conv.ELBK.118)

The evidential particle *ebit* ~ *e:t* can also convey a connotation of uncertainty or the like. In example (419), the speaker talks about her life but is not sure anymore when she went away from a given place.

- (419) *He:, toguh-uōn-na:k-ka* *bar-bit* *e-ti-m* *e:t*
 AFF nine-ten-PROPR-DAT/LOC go-PTCP.PST AUX-PST1-1SG EVID
on-ton *min.*
 that-ABL 1SG.PRO
 ‘Yes, [it was] probably/apparently in [19]90 [when] I left from there.’
 (PoPD_KuNS_2004_Life_conv.PoPD.068)

Additionally, three other particles can mark indirect evidentiality in Dolgan: *būōllaga*, *eni*, *ūhū*. The first item, *būōllaga*, is the lexicalized third-person singular form of the inferential (see Section 6.6.1) of the copula verb *būōl-*. As expected, this particle exclusively expresses inferential indirect evidentiality, when combined with finite tense-aspect forms. Example (420) is from a story where the protagonist went hunting. Now it is told that he has brought the prey home. The speaker, i.e. the storyteller, concludes from these circumstances that the protagonist and his mother also eat the prey.

- (420) *Bu-lar-i* *h-i:l-ler* *būōllaga*.
 this-PL-ACC eat-PRS-3PL INFR
 ‘[The boy carries the bear with the beluga home to his mother.] They eat them for sure.’
 (ChuAE_1968_Lyppyrdaan_flk.071)

Example (421) shows the same functional domain: It is from a tale about an orphan boy whose origin is unknown in the beginning. Then a man goes around and finds a camp, where many people have died. From this circumstance, he concludes that the orphan boy belonged to those people. However, the syntax significantly differs since *būōllaga* is rather a finite verb than a particle in this context, agreeing with the subject *ogo* ‘child’, which in turn heads a rel-

ative clause. Literally, the example means: “Hey, it must be a child, which has remained from these ones”. This example can be seen as an intermediate stage between the finite inferential forms described in Section 6.6.1 and the inferential particle *būðllaga* in example (420). The application of a relative clause is already a step back from using the inferential as a finite verb form, which basically could have been formed from *ka:l-* ‘stay’ as well.

- (421) *E:, ba-lar-tan ord-on ka:l-bit ogo*
 eh this-PL-ABL remain-CVB.SEQ stay.AUX-PTCP.PST child
būðl-lag-a.
be-INFR-3SG
 ‘Hey, this child must have remained from these ones.’
 (SaSS_1964_NganasanBraveBoy_flk.028)

As for the particles *eni* and *ühü*, the former tends to express inferential indirect evidentiality (422), whereas the latter expresses mediated (quoted, hearsay) indirect evidentiality (423). Formally, the particles stand again adjacent to finite tense-aspect forms of the verb.

- (422) *Karak-ta:k eni, burūo-nu kör-ör eni.*
 eye-PROPR.3SG **apparently** smoke-ACC see-PRS.3SG **apparently**
 ‘He has obviously eyes, so he will apparently see the smoke.’
 (MiAI_1964_OldPeasantOldWoman_flk.154)
- (423) *Kaja, kihi-ler-i Maskva:-ga ill-el-ler ühü.*
 well human-PL-ACC Moscow-DAT/LOC take.away-PRS-3PL **they.say**
 ‘Well, people are brought to Moscow, they say.’
 (BeES_1997_HistoryOfKatyryk_nar.120)

To sum these sections up, one can clearly state that the expression of evidentiality in Dolgan is rather rudimentary, especially compared to the neighbouring Samoyedic languages Nganasan, Nenets and Enets. Thereby, Dolgan marks only indirect evidentiality; within this functional domain, inferentials are partially discriminated against quotatives and hearsays. Formally, there is one dedicated evidential form, the inferential; moreover, one tense-aspect form (postterminal evidential past) and a handful of particles are involved in expressing evidentiality.

Non-clausal Syntax

7.1 Noun Phrase

As the term *noun phrase* (NP) already suggests, noun phrases have a noun as their head. They are, thus, organized around a noun. Thereby, the noun phrase can exhibit different degrees of complexity: It can either contain only the noun itself (Section 7.1.1) or be modified by another item (Section 7.1.2). In the latter case, the modifying item can again be a single item (Sections 7.1.2.1 to 7.1.2.5), or it can even be an entire clause forming so-called heavy noun phrases (Section 7.1.2.6). Finally, the elements of noun phrases can be separated from each other under certain circumstances, yielding discontinuous noun phrases (Section 7.1.3), and noun phrases can be coordinated (Section 7.1.4).

Noun phrases are generally head-final in Dolgan, which conforms to its basic SOV structure, except some quantified noun phrases (see Section 7.1.2.5) and discontinuous noun phrases (see Section 7.1.3). Apart from this, there are only very few idiosyncratic exceptions to the head-final structure, which are negligible from both a quantitative and qualitative point of view.

7.1.1 Bare Noun Phrase

Bare noun phrases are the simplest type of noun phrases since they only contain the phrase's head, namely the noun itself. However, not only nouns but also pronouns can function as the head of a bare noun phrase. (424) to (426) show bare noun phrases with nouns and a pronoun as their head.

- (424) *D'îe-lerin* *att-i-gar* [NP
house-POSS.3PL.GEN place.beneath-POSS.3SG-DAT/LOC
kopsok] *tur-ar.*
storeroom stand-PRS.3SG
‘Beneath their house, there is a storeroom standing.’
(KiMN_19900417_Milkmaid_flk.027)

- (425) [NP *Hîa*] *bûōl-a:čči* [NP *öttük-ke*].
fat be-HAB.3SG hip-DAT/LOC
‘The fat is at the [reindeer’s] hip.’
(AnIM_2009_Sausage_nar.031)

- (426) [NP *Bihigi*] [NP *ejigi-n*] *h-iêk-pit*, [...]

1PL.PRO 2SG.PRO-ACC eat-FUT-1PL

'We will eat you, [if you don't skin an old woman and make a shaman's

drum out of the skin].'
 (BaRD_1930_DaughterOfNganasan_flk.068)

The given examples show that bare noun phrases can be definite and indefinite. The notion of *definiteness* is understood here from a discourse-pragmatic point of view (following i.a. Heim 1982 and Lyons 1999): A definite referent is, thus, familiar or unambiguously identifiable for the hearer in a given linguistic context. Example (424) contains an indefinite NP since the named storeroom is just introduced in the discourse. On the contrary, example (425) exhibits two definite NPs, whereby the definiteness is established via the preceding context and world knowledge. Syntactically, bare noun phrases fulfil various syntactic functions, carrying number and case markers. However, possessive suffixes must not be attached to bare noun phrases since the possessive suffix always has a nominal or pronominal antecedent that modifies the noun phrase. In Sections 7.1.2.3 and 7.1.2.4, such structures are analyzed in detail. Bare noun phrases headed by a noun are relatively rare in Dolgan speech; more often, some modification can be observed. In contrast, pronouns are in most cases not further modified, wherefore they more often form bare noun phrases.

7.1.2 Modified Noun Phrase

7.1.2.1 Determined Noun Phrase

Determined noun phrases can exhibit articles as modifiers in languages like English or German, but also demonstrative pronouns (Payne 1997: 102). Since Dolgan lacks articles, only demonstratives (see Section 3.3.2.3 for a detailed description) are relevant here.

Demonstratives modifying a noun phrase precede their head, as a rule, not agreeing with it in case, number and possession. Admittedly, demonstratives may also occur after nouns and nearly everywhere in the clause. Still, in this case, they do not function as modifiers of noun phrases but as discourse items (placeholders, hesitation markers and the like; see Section 10.4). (427) and (428) show noun phrases modified with the demonstrative pronouns *bu* 'this' and *ol* 'that'.

- (427) *Bu dojdu-ga aragi: huôk.*
 this land-DAT/LOC alcohol NEG.EX
 'In this land, there is no alcohol.'
 (KiPP_2009_Story_nar.KiPP.022)

- (428) *Ol kihi-ler bihiē-ke kel-e hild'-iāk-tara*
 that human-PL 1PL.PRO-DAT/LOC come-CVB.SIM go.AUX-FUT-3PL
Valačanka-ttan.
 Volochanka-ABL
 'Those people will come to us from Volochanka.'
 (PoNA_19910207_Fishing_nar.070)

Finally, modifying demonstratives make a noun phrase necessarily definite, as examples (427) and (428) clearly show. Nevertheless, this is no necessary condition for analyzing a noun phrase as definite, since also bare noun phrases can be definite (see Section 7.1.1 before).

7.1.2.2 Adjective as Modifier

A widespread way to modify a noun phrase in Dolgan is to use an adjective. The adjective defines some properties, e.g. size, colour, quality or the like, of the given referent more closely. Following the head-final structure of Dolgan noun phrases, adjectives are exclusively placed before the noun they modify. Coming to their morphosyntactic behaviour, modifying adjectives do not agree with their head noun, neither in number nor in case or possession.

- (429) *Kinit-im hürde:k üčügej d'aktar.*
 daughter.in.law-POSS.1SG very good woman
 'My daughter-in-law is a very good woman.'
 (KiPP_2009_Belief_nar.KiPP.081)
- (430) *Ulakan ihit-ter-ge ur-ullu-but-tar minn'iges*
 big dishes-PL-DAT/LOC lay-PASS-PST2-3PL tasty
hit-ta:k kilieb-ter.
 smell-PROPR bread-PL
 'On big plates, tastily smelling [loaves of] bread are placed.'
 (PoNA_19900810_Tojo0InVolochanka_nar.095)
- (431) *De, ol ma:mam d-ir, kird'agas ma:mam.*
 well that mum-POSS.1SG say-PRS.3SG old mum-POSS.1SG
 'Well, my mum says, my old mum.'
 (PoTY_2009_Aku_nar.018)

It should be mentioned already here that items expressing nationality or ethnicity such as *haka* 'Dolgan', *tojus* 'Ewenk' or *d'urak* 'Nenets' do not behave like adjectives morphosyntactically since they call for a third-person possessive suf-

fix at the head noun. This pattern is discussed in Section 7.1.2.3 in the context of nouns modifying a noun phrase.

Multiple modifications of a noun phrase by adjectives are possible and frequent in Dolgan, e.g. *ulakan hana d'ie* 'a/the big new house' (PoNA_2004_Mika-MukulajAloneAtHome_nar.010). When a noun phrase is modified by both a demonstrative and an adjective, the former precedes the latter, as displayed in example (432).

- (432) *D'e onno ol ulakan ajda:η-ηa,* [...].
 well there **that big noise-DAT/LOC**
 'And in that big riot [different people were killed, here those
 whatchamacallit, deputies].'
 (MaPX_KuNS_200X_YakutsOfEssej_conv.MaPX.031)

7.1.2.3 Noun as Modifier

The modification of a noun by a further noun is similarly common as its modification by an adjective. In Russian turcological tradition, these constructions are often called *izafet* (Ubrjatova 1985: 83; Artem'ev et al. 2013: 21–26). However, they differ from actual *izafet* structures such as Ottoman *Ba:b-i-a:li:* 'Sublime Porte', consisting of *ba:b* 'gate', *a:li:* 'high' and the linking marker *-(y)I* (Johanson 2021: 798). In Dolgan noun phrases, three structures can be distinguished.

1. bare modifying noun + bare head noun
2. bare modifying noun + head noun inflected with a possessive suffix
3. modifying noun in genitive case + head noun inflected with a possessive suffix

The first structure resembles very much the structure observed with adjectives modifying nouns. This structure occurs when the modifying noun describes the quality of its head noun, but there is no affinity relationship between both entities. E.g. *uol ogo* 'boy child' means 'son', but *uol ogo-to* 'boy child-POSS.3SG' means 'the boy's child'. In the former case, *uol* specifies the meaning of *ogo* further, whereas in the latter case, *uol* refers to a person belonging to *ogo*, namely their father. Often, such structures express the material of a referent, but also professions of persons may be specified.

- (433) *Uraha d'ie hoj-d-o.*
pole house cool-PST1-3SG
 'The tent [lit. pole house] cooled down.'
 (AkEE_19XX_BoySister_flk.090)

- (434) [...] *elbek ta:s d'ie-ler ba:l-lar*.
 many stone house-PL EX-3PL
 '[Khatanga, saying it in Dolgan "Noskuo", has grown], there are many stone houses.'
 (PoNA_200X_GirlFromTundra_nar.006)
- (435) [...] *igir-a:čči-lar ol ba:biska eme:ksin-i*.
 call-HAB-3PL that midwife old.woman-ACC
 '[Eh, if she is close], they call this old midwife.'
 (SuAA_20XX_Birth_nar.019)

If both a modifying adjective and a modifying noun occur in the phrase, the former precedes the latter, as shown in example (436).

- (436) *Ulakan ki:h ogo-bun*, [...].
 big girl child-1SG
 'I am the big daughter, [I am big, though].'
 (BeAM_199X_LegendSpiritOfTrees_nar.009)

In contrast to these structures, many nouns modifying a further noun call for a possessive suffix attached to the latter (patterns 2 and 3 shown above). Apart from a few exceptions, such constructions display possessive relationships. Thereby, the modifying noun expresses the possessor, and the modified noun expresses the possessee, like in (437).

- (437) *Ogurūō Bitik ki:h-a ta:j-d-a*, [...].
 beads beard daughter-POSS.3SG guess-PST1-3SG
 'Pearl Beard's daughter understood [why the master of water had warned her].'
 (AkEE_19900810_PearlBeard_flk.071)

However, the term *possessive relationship* is to be understood in a broad sense since also compound-like elements, which diachronically may display a possessive relationship, behave the same way. In example (438), the expression *taɲara d'iete* 'church' literally means 'God's house' ~ 'house of God'.

- (438) [...] *buōl-but-a taɲara d'ie-te*.
 become-PST2-3SG God house-POSS.3SG
 'The church has become [a big landmark there].'
 (PoNA_200X_GirlFromTundra_nar.007)

Possessors modifying a noun phrase precede adjectives modifying the noun phrase like in example (439). Both the possessor noun *Lî:bira* ‘Lyybyra’ and the adjective *ibagas* ‘liquid’ modify the head noun *hiâta* ‘his fat’, whereby the possessive suffix at the latter additionally cross-refers to the possessor.

- (439) *Lî:bira ibagas hiâ-ta tog-un-n-a!*
 Lyybyra liquid fat-POSS.3SG pour.out-MID-PST1-3SG
 ‘Lyybyra’s liquid fat leaked out!’
 (PoS_PrG_1964_Lyybyra_flk.041)

Indeed, this pattern only applies if the modifying adjective scopes over the possessee. If the modifying adjective scopes over the possessor, in turn, it is placed before the expression referring to the possessor. In example (440), the adjective *baj* ‘rich’ modifies the noun *kupiês* ‘merchant’, and not the noun *gûôrata* ‘his town’; consequently, it precedes the former.

- (440) [...] *baj kupiês gûôrat-a, bihila:k.*
 rich merchant town-POSS.3SG apparently
 ‘[He saw it], it is apparently the town of a rich merchant.’
 (KiMN_19900417_Milkmaid_flk.124)

As mentioned in the previous section, nominal items expressing ethnicity, nationality, or origin behave inconclusively. They obligatorily call for the realization of a possessive suffix at the head noun. Thus, it would be expected that adjectives modifying the noun appear between those nominal items and the head noun, e.g. **haka ulakan kihi-te* ‘a/the big Dolgan human’. On the contrary, example (441) shows that the modifying adjective precedes both items in relevant contexts.

- (441) [...] *kühüŋ-ŋjü haka ah-a baram-mit*
 autumn-ADJZ Dolgan food-POSS.3SG run.out-PTCP.PST
bûôl-l-a, [...].
 become.AUX-PST1-3SG
 ‘[The fox, though, when it became spring, nowhere food could be found], the autumnal food of the Dolgans had run out, [which the Dolgans had as reserves].’
 (UkET_2002_FoxJayBuzzard_flk.007)

In Section 4.2.2.3, it was already described that in double or even multiple possessive constructions (X’s Y’s ... Z), the middle items are marked with the

genitive case if they are third-person referents. This genitive marking is, in turn, impossible in simple possessive constructions (X's Y). The former structure is undoubtedly a functional relict of the inherited pattern in the Turkic language family since the structure "possessor-GEN possessee-POSS" is the prevalent one there, e.g. Uzbek *ādām-niŋ üy-i* 'man-GEN house-POSS.3SG' = 'the man's house' (Johanson 2021: 799). However, it is not a formal relict since *-n* is not a residue of an old genitive suffix but the so-called "pronominal *n*" (see Section 4.3.2 for a thorough discussion). Example (442), repeated from Section 4.2.2.3, displays a sequence of even three possessors.

- (442) *Er-im* *baltî-tin*
 husband-POSS.1SG younger.sibling-POSS.3SG.GEN
ogo-lor-o *iti* *bar-a:čči-lar oŋuōk-tar-ga* *min*
 child-PL-POSS.3SG this go-HAB-3PL tomb-PL-DAT/LOC 1SG.PRO
ogo-lor-bun *kitta.*
 child-PL-POSS.1SG.ACC with
 'The children of my husband's younger sister usually go to the cemetery
 with my children.'
 (KiPP_2009_Belief_nar.KiPP.093)

Coming to the syntax of these constructions, the most critical question to answer is which possessor scopes over what. Here, the kinship terminology neatly allows a precise analysis. The first possessor (covert first-person pronoun) scopes over *erim* 'my husband', but not over the following items since ego's husband's younger sister and nephews/nieces are definitely not ego's younger sister and nephews/nieces, respectively. Nor are ego's younger sister's children at the same time ego's children, wherefore *erim* 'my husband' must not scope over *ogoloro* 'her children', but only over *baltitin* 'his younger sister'.

Another issue to discuss in this context is the possibility of modifying possessors with adjectives, i.e. structures where the modifying adjective scopes over the possessor but not over the possessee. Example (443) exhibits such a structure. From the context, it becomes clear that only the first reading is possible since the speaker refers to his grandfather's three daughters and not to himself and his siblings. If the possessee were modified, the structure *kî:hîn ilgin ūōla* 'his daughter's small son'—similarly to example (439) above—would be expected.

- (443) *Onton buōllagina ilgin ki:h-in uōl-a*
 then though little daughter-POSS.3SG.GEN son-POSS.3SG
buōl-a-bin min.
 be-PRS-1SG 1SG.PRO
 ‘Then the son of [his] small daughter, that’s me.’ ~
 * ‘Then the small son of [his] daughter, that’s me.’
 (ZhNA_KuNS_20XX_LifeAndMusic_conv.ZhNA.011)

Finally, the question arises whether possessors and demonstratives can co-occur in one single noun phrase in Dolgan and, if so, how they are formed syntactically. Indeed, there is no constraint against such constructions; possessors and demonstratives can co-occur. Admittedly, there are very few comprehensive examples in the analyzed material, where not only a possessor and a demonstrative modify the same noun phrase, but the former is additionally overtly expressed. Nevertheless, it can be said that the position of the demonstrative again depends on its scope: In example (444), *ol* ‘that’ scopes over the possessee, whereas in example (445), *bu* ‘this’ scopes over the possessor. Consequently, the demonstrative follows after the possessor in the former case but precedes it in the latter case.

- (444) *Ehe-tin, ebe-tin ol*
 grandfather-POSS.3SG.GEN grandmother-POSS.3SG.GEN that
oron-u-gar da olor-pot
 bed-POSS.3SG-DAT/LOC EMPH sit.CAUS-NEG.PTCP.PRS
e-ti-lere.
 AUX-PST1-3PL
 ‘On the grandfather’s bed, on the grandmother’s bed she [= the woman] was not even allowed to sit.’
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.043)
- (445) [...] *ol kenni-ki atag-a bu tü:le:k kihi*
 that back-ADJZ leg-POSS.3SG this hairy human
ili-ti-ger ka:l-bit.
 hand-POSS.3SG-DAT/LOC stay-PST2.3SG
 ‘[He seized the back legs of the sledge], those back legs stayed in the hand of this hairy human.’
 (BaRD_1930_HairyPeople_flk.024)

Noun phrases modified by a noun can be indefinite and definite, whereby two patterns must be kept apart. Quasi-compounds such as *uōl ogo* ‘son’ or *taŋara*

d'iēte 'church' can be definite and indefinite, depending on the context. Modified noun phrases, indicating a possessive relationship, are definite since possessed entities, i.e. the head noun, can be analyzed as default definite (Taylor 1995: 201).

7.1.2.4 Pronoun as Modifier

Expectedly, the modifying noun of the structures described in Section 7.1.2.3 can also be pronominalized and realized overtly or covertly. If the pronoun is expressed overtly, it can be a personal or possessive pronoun. By now, it is not understood what difference the choice makes. The following clauses, which the same speaker utters in the same recording, do not show any decisive differences. In both cases, the modified noun phrase is the subject of the clause, the modifying possessor immediately precedes its head noun, and the possessive relationship is inalienable since kinship terms are used.

- (446) *Onon min ogo-m ula:t-t-a.*
 so 1SG.PRO child-POSS.1SG grow-PST1-3SG
 'My child has grown up.'
 (KiMN_19900417_Milkmaid_flk.090)

- (447) *Eniēne er-iŋ togo ülele:-bet?*
 your husband-POSS.2SG why work-NEG.PRS.3SG
 'Why does your husband not work?'
 (KiMN_19900417_Milkmaid_flk.008)

Example (448) shows a pronominalized modifying possessor that is covertly realized.

- (448) *A pro ma:ma-m d-i:r: [...]*
 and mum-POSS.1SG say-PRS.3SG
 'And my mum says: [...].'
 (SuON_KuNS_19990303_HardLife_conv.SuON.060)

Finally, the position of pronouns used as modifiers does not differ from the position of nouns used. In example (449), the linear order is *pronoun—demonstrative—adjective—noun*, whereby it is crucial that *bu* 'this' and *ulakan* 'big' scope only over the possessee, i.e. *ogom* 'my child'.

- (449) *Bu ka maɲnəj minɪɛnə bu ulakan ogo-m, bu*
 this PTCL at.first my this big child-POSS.1SG this
Bahɪ:laj bar.
 Vasily EX
 ‘And then, at first, there is my big child, Vasily.’
 (AnMS_1972_GoodSovietTimes_nar.049)

7.1.2.5 Quantified Noun Phrase

7.1.2.5.1 General Patterns

Quantified noun phrases contain a noun that is modified by a quantifying item. The latter may be various kinds of numerals, mainly cardinal and ordinal numerals, and quantifiers like *elbek* ‘many’ or *agɟjak* ‘few; little’—see also Section 3.4 for the description and lists of numerals and quantifiers. Except the quantifier *bari* ~ *barita*, which is discussed separately in Section 7.1.2.5.2, all those items behave similarly from a syntactic point of view. They are placed before the modified noun and usually do not agree with their head noun. They neither require a particular form of the head noun, which is a solid argument to analyze them as modifiers. The following examples exhibit noun phrases modified by a cardinal numeral (450), an ordinal numeral (451) and the quantifier *elbek* ‘many’ (452).

- (450) *Onno ikki taba-ni köliɟ-el-ler.*
 there two reindeer-ACC harness-PRS-3PL
 ‘There, one harnesses two reindeer.’
 (AnIM_2009_Argish_nar.026)
- (451) *Hett-is kila:s-ka ũören-er.*
 seven-ORD class-DAT/LOC learn-PRS.3SG
 ‘He studies in the seventh grade.’
 (BeSN_2009_Family_nar.079)
- (452) *Gini-ni kitta elbek uska:n kel-îe.*
 3SG.PRO-ACC with many hare come-FUT.3SG
 ‘Together with him, many hares will come.’
 (ErSV_1964_OldManHares_flk.018)

At first glance, the given examples stand to reason that numerals and quantifiers syntactically behave like modifying adjectives discussed in the previous section. However, in contrast to modifying adjectives, only one quantifier or numeral can occur in a noun phrase, cf. the constructed examples in (453).

This structural divergence could hardly be explained if numerals and quantifiers were syntactically analyzed similarly to modifying adjectives. Admittedly, structures such as *#kara če:lke taba* ‘black white reindeer’ are inadequate as well, but this is due to the semantics of the adjectives and not due to structural properties of modifying adjectives. Consequently, numerals and quantifiers differ syntactically from modifying adjectives.

- (453) a. *ulakan če:lke taba*
 big white reindeer
 ‘a/the big white reindeer’
- b. **ikki hette taba*
 two seven reindeer
- c. **ikk-is hett-is taba*
 two-ORD seven-ORD reindeer
- d. **elbek aqijak taba*
 many few reindeer
 (constructed examples)

The discussion above predicts the linear order of numerals and quantifiers in relation to modifying possessors and adjectives. If the given explications are correct, the order should be *possessor—numeral/quantifier—adjective—noun*. The examples (454) to (456) show that this is indeed the case. Note that *ta:s* ‘stone’ in (455) is undoubtedly no adjective, but a noun. However, as shown in Section 7.1.2.3, modifying nouns, which describe the quality of their head noun, behave morphosyntactically like adjectives.

- (454) *Araj* [_{NP} *ikki ulakan ojun-u*] *ki:r-dar-ar* [...].
 only two big shaman-ACC shamanize-CAUS-PRS.3SG
 ‘[Only after two years] he made two big shamans shamanize.’
 (BaRD_1930_DaughterOfNganasan_flk.008)
- (455) [...] [_{NP} *elbek ta:s d'ie-ler*] *ba:l-lar*.
 many stone house-PL EX-3PL
 ‘[Khatanga, saying it in Dolgan “Noskuo”, has grown], there are many stone houses.’
 (PoNA_200X_GirlFromTundra_nar.006)

- (456) *Ūol uru:ka-ti-nan* [_{NP} *Aba:hi agis bah-in*]
 boy mitten-POSS.3SG-INS devil eight head-POSS.3SG-ACC
tu:ra oksu-but.
 completely beat-PST2.3SG
 ‘The boy beat off the devil’s eight heads with his mitten.’
 (AkEE_19xx_BoySister_flk.030)

As for quantifiers, there is one more argument favouring the analysis given above. In contrast to modifying adjectives, quantifiers can appear after their head noun. Additionally, they are eventually case marked then, if necessary. Minimal (narrow) focus (see Section 10.2) realized on such items is a comprehensive context. In example (457), the quantifier *agijak* is minimally focused since the speaker talks about rewarded work of a handicraft contest and the amount of money given. Prosodically, the focus accent is realized on the item *agijakka:ni* ‘only few’. In order to appear in the focus position, i.e. immediately preverbally, it has to stand after its head noun *karči*. Additionally, the quantifier “takes over” case morphology, which may be explained by the fact that usually, only the rightmost item of a noun phrase exhibits inflection. Example (458) has the same information structural configuration: The speaker is examining several wolf traces, speculating about the wolves which had left them, whether they were male or female, small or big and the like. The focus accent is realized on *ulakan* ‘big’ here. Nevertheless, it is not placed after its head noun *börö* ‘wolf’. Consequently, quantifiers may occur after their head noun, whereas adjectives must not; thus, they must be accounted for differently.

- (457) *H-oččogo, oččogo karči* [_{FOC} *agijak-ka:n-i*] *bier-el-ler*
 EMPH-then then money few-INTS-ACC give-PRS-3PL
būō, [...].
 EMPH
 ‘Then—then they gave only FEW money, [...].’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.109)
- (458) [_{FOC} *Ulakan*] *börö e-bit,* [...].
 big wolf be-PST2.3SG
 ‘It was a BIG wolf, apparently, [the old man was thinking].’
 (AsKS_19xx_Amulet_nar.042)

Interestingly, numerals behave like adjectives rather than quantifiers in this respect, as can be seen in (459).

- (459) *Inniki-ler* [_{FOC} *ikki*] *kihi* *būōl-ar*, [...].
 front-PL two human be-PRS.3SG
 ‘There are TWO people in the front, [on the left and the right also TWO people on each SIDE].’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.050)

Consequently, numerals and quantifiers should be treated differently from a syntactic point of view. Another diverging feature of them is that quantifiers may be modified by degree adverbs such as *bagaji* ‘very’ or *hiēse* ‘little’, but numerals must not. Demonstratives, finally, precede quantifiers and numerals in a modified NP systematically, as displayed in example (460).

- (460) [...] *“iti, iti ikki kihi”, d-i-d-i.*
 that that two human say-CVB.SIM-say-CVB.SIM
 ‘[“They are spirits of the tree”, he says], “those two men”, he says.’
 (BeAM_199X_LegendSpiritOfTrees_nar.232)

7.1.2.5.2 *The Quantifier bari ~ barita*

The most complex quantifier in Dolgan is undoubtedly the universal quantifier *bari ~ barita* ‘every; all’. Its semantic properties have been extensively dealt with by Siegl (2018) and in Section 3.4.7 of this grammar. Therefore, only syntactic features are discussed here.

The analysis of the Upper Dolgan item *bari*, which is placed prenominally (461), is straightforward and parallel to the other quantifiers in the previous section.

- (461) *Bari kihi onno beleg-i biēr-e:čči.*
 all people there present-ACC give-HAB.3SG
 ‘All people usually give presents there.’
 (PoNA_19900810_TripToVoloChanka_nar.076)

The analysis of the item *barita* and its inflected forms, used in both Upper and Lower Dolgan, is much more complicated. The examples (462) and (463) show once more instances of postnominal *barita*.

- (462) *Kös bari-ta bar-an ka:l-bit.*
 nomad all-POSS.3SG go-CVB.SEQ stay.AUX-PST2.3SG
 ‘All the nomads went off.’
 (PoKK_1964_TwoOrphanBoys_flk.112)

- (463) *Čaŋit kustug-un bari-tin ip-pit*
 Changit arrow-POSS.3SG.ACC all-POSS.3SG.ACC shoot-PST2.3SG
da küre-bit.
 and escape-PST2.3SG
 ‘The Changit shot all his arrows and escaped.’
 (ChPK_1970_Ngasan_flk.053)

The first problem to analyze is the item’s postnominal position itself. Above it was stated that the Dolgan noun phrase is generally head-final, which would contradict analyzing postnominal *barita* as a modifying quantifier within a noun phrase. To avoid a postnominal modifier, one could assume postnominal *barita* being either a noun with the rough meaning ‘its allness’ or an adverb with the sense ‘completely’. Literally, example (462) would then mean ‘The nomads’ allness went off.’ or ‘The nomads went off completely’, respectively. However, two structural features contradict these analyses. First, in emerging “double possessive constructions”, no genitive marking of the middle component can be found. If *aha* ‘his food’ would syntactically function as the “possessor” of a noun *barita*, genitive marking of the former would be expected in example (464) (see Sections 4.2.2.3 and 7.1.2.3 for double possessives and genitive case marking).

- (464) [...] *ira:kta:gi ah-a bari-ta minn’iges kurduk*
 czar food-POSS.3SG all-POSS.3SG sweet like
ginîe-ke.
 3SG.PRO-DAT/LOC
 ‘[The poor farmer couldn’t think out anything: he didn’t know any sweet food], all of the czar’s food seemed sweet to him.’
 (PoMA_1964_YoungCzar_flk.011)

Second, if a noun phrase modified by postnominal *barita* occurs in a non-subject position, *barita* is case-marked. This could not be the case if it were an adverb since adverbs are synchronically not inflected for case in Dolgan (see Section 3.6). Additionally, the modified noun can exhibit bare accusative case marking (i.e. without possessive suffix) in object position, which again could not be the case if it were the syntactic “possessor” of the quantifier.

- (465) *Bu d'on-u bari-tin igir-an-nar, [...].*
 this people-ACC all-POSS.3SG.ACC call-CVB.SEQ-3PL
 'Having invited all people, [that's the celebration of the birth of the child].'
 (SuAA_20XX_NameGiving_nar.032)

The given structures show that analyzing postnominal *barita* as a noun (phrase) of its own or as an adverb is infelicitous and that *barita* indeed functions as a modifying quantifier.

Taking a generative perspective, it would not be far to seek to analyze the item as a *floating quantifier* or *stranded quantifier*. These terms mean that it is prenominal on the deep structure of the clause and realized postnominally only on its surface structure (see Sportiche 1988 and Shlonsky 1991 for technical details). However, given the theoretically neutral approach taken here, an applicable in-depth analysis goes far beyond the scope of the grammar at hand. In what follows, I use the term *floating quantifier* merely to designate a quantifying item that is not bound to a fixed position with respect to the item it modifies. Siegl (2018: 25–26) argues against analyzing postnominal *barita* as a floating quantifier since both the modified noun and *barita* appear in one intonational unit, which would make them likely to be realized in the same constituent of the clause. Admittedly, an intonational link with a pitch accent on *barita* can be observed in most cases. However, there is a handful of examples that underline the analysis of postnominal *barita* as a floating quantifier since the elements can, in fact, be separated both intonationally (466) and syntactically ((467) and (468)).

- (466) *D'ehiěj-der-ij e: ... bari-lara da buōl-bat-tar [...].*
 Yessey-PL-POSS.2SG eh all-POSS.3PL EMPH be-NEG.PRS-3PL
 'Not all, eh, people from Yessey were [rich people, rich families].'
 (MaPX_KuNS_200X_YakutsOfEssej_conv.MaPX.016)
- (467) *Kötör-dör o-nu kör-öt bari-lara küre:-bit-ter.*
 bird-PL that-ACC see-CVB.ANT all-POSS.3PL escape-PST2-3PL
 'The birds, having seen that, all escaped.'
 (ErSV_1964_WarBirdsAnimals_flk.129)
- (468) *Ka, balik-pin togo bari-tin hîe-bik-kit=ij?*
 well fish-POSS.1SG.ACC why all-POSS.3SG.ACC eat-PST2-2PL=Q
 'Well, why did you eat all of my fish?'
 (PoXN_19701118_Chopochuka_flk.039)

Additionally, there are some—admittedly few—instances of bare *bari* in postnominal position ((469) and (470)). This is another argument for analyzing postposed *barita* as a floating quantifier since it shows that the possessive marking still appears to be an inflectional property of the quantifier and is not (yet) lexicalized.

- (469) *Kötör-dör bari köt-ütele:n ka:l-bit-tar.*
 bird-PL all fly-MULT-CVB.SEQ stay.AUX-PST2-3PL
 ‘All the birds flew away.’
 (ErSV_1964_SnowOwl_flk.041)
- (470) *Köh-ö-büt oččogo itte-bitin bari-karn*
 migrate-PRS-1PL then different-POSS.1PL.ACC all-INTS
teri-n-e-bit.
 prepare-MID-PRS-1PL
 ‘[When] we migrate, we prepare all our things.’
 (AnIM_2009_Argish_nar.001)

What remains to explain is the morphological marking of postnominal *barita*. From my point of view, case and number marking has to be kept apart from the appearance of possessive suffixes. The eventual case and number marking of postnominal *barita* seems to be an instance of morphological matching. Thereby, case marking is obligatory, and number marking is facultative. In example (471), the quantifier is inflected only for case, in (472) for both case and number. In either case, this resembles the pattern observed with the instance of postnominal *agijak* ‘few’ in Section 7.1.2.5.1.

- (471) *Kin:t-ter-bin bari-tin bul-lak-pina*
 daughter.in.law-PL-POSS.1SG.ACC all-POSS.3SG.ACC find-TEMP-1SG
elbek-ter.
 many-3PL
 ‘When I find all my daughters-in-law, they are many.’
 (KiPP_nn2_2009_Family_nar.KiPP.090)
- (472) *D'te-ge ba:r uska:t-tar-i bari-larin imičči*
 house-DAT/LOC EX hare-PL.ACC all-POSS.3PL.ACC completely
ölör-tö:n ke:s-pit-ter.
 kill-ITER-CVB.SEQ throw.AUX-PST2-3PL
 ‘They killed all the hares that were in the tent.’
 (ErSV_1964_OldManHares_flk.055)

As for the possessive suffix at postnominal *barita*, the first important note is that it is most frequently a third-person form, even if an eventual possessor of the noun phrase displays another person like in example (471). Therefore, the possessive suffix can hardly be accounted for in terms of agreement or morphosyntactic matching. It can neither be explained as indicating a syntactic “possessor” of *barita* itself for reasons already discussed above.

However, the latter may hint at a tentative, rather psycholinguistic explanation, namely grammaticalization via morphological attraction. Analyzing agreement mismatches in Romance languages, Franck et al. (2006) conclude that false plural agreement on the verb appears significantly more likely if there is a plural noun adjacent to the verb as shown by the following Italian minimal pair: *L'amica dei vicini telefonerà*. ‘the.friend of.the neighbours phone.FUT.3SG’ = ‘The friend of the neighbours will phone.’ vs *Telefonerà l'amica dei vicini*. ‘id.’. Since the pluralized noun *vicini* stands verb-adjacent in the former clause, it evokes significantly more number mismatches at the verb—that is *telefonanno* ‘phone.FUT.3PL’—in reproduction tasks than the latter clause (Franck et al. 2006: 187–188). For postnominal *barita* in Dolgan, it can be stated that it, of course, resembles the structure “noun noun-POSS.3SG”, which is very frequent in the language (see Section 7.1.2.3). Since the structure “noun noun” is relatively uncommon in Dolgan, it could be argued that the possessive suffix is “falsely” attached to the quantifier in postnominal position. This pattern would resemble the statistically more likely false plural marking on the verb in Romance if a pluralized noun is adjacent. However, this analysis is tentative and needs more research involving experimental methods.

To sum up, it can be stated that *bari* ~ *barita* can best be analyzed as a floating quantifier, which in either case modifies the noun it relates to. Consequently, it is neither the syntactic “possessee” of the latter nor an adverb. As for its dialectal distribution, postnominal *barita* is obligatory in Lower Dolgan, whereas in Upper Dolgan, both *bari* and *barita* occur.

7.1.2.6 Relative Clause as Modifier

Finally, also relative clauses can function as modifiers of a noun phrase since they “replace” an attribute within their matrix clause (see also Section 9.3.2). Due to its complexity, the resulting modified noun phrase is also called “heavy NP”. Thereby, the relative clause can either consist of only the verb or include the verb’s arguments. The internal structure of relative clauses is discussed in Section 9.3.2 in more detail.

Relative clauses modifying a noun phrase are expected to behave syntactically like the adjectival modifiers described in Section 7.1.2.2. Indeed, this is the observed pattern: They mostly precede their head noun, and the parti-

ciple, which is the functional equivalent of the adjective, does not agree with the head noun.

- (473) *Toy-on öl-büt taba-lar honno*
 freeze-CVB.SEQ die-PTCP.PST reindeer-PL immediately
bari-lara tilin-ni-ler.
 all-POSS.3PL revive-PST1-3PL
 'The frozen reindeer all immediately revived.'
 (AkEE_19XX_BoySister_flk.150)

Since demonstrative pronouns scoping over the head noun precede the modifying relative clause like in (474) and (475), relative clauses can syntactically be analyzed like adjectival attributes.

- (474) [...] *ol ogo törö:büt d'uka:ta, [...]*
 that child be.born-PTCP.PST tent-POSS.3SG
 '[If there is a tent: "Such a child was born, apparently], the tent, where the child was born", [one says].'
 (SuAA_20XX_Birth_nar.074)

- (475) *Iti Hinda:ski-ga üören-er ogo-lor, e:?*
 that Syndassko-DAT/LOC learn-PTCP.PRS child-PL AFF
 'The children who learn in Syndassko, right?'
 (KiPP_KuNS_200211_LifeChildren_conv.KuNS.041)

7.1.3 Discontinuous Noun Phrases

In discontinuous noun phrases, the head noun does not appear in its usual phrase-final position but somewhere else in the clause. This pattern is most apparent when modifiers do not stand adjacently to the head noun anymore, but also floating quantifiers (see Section 7.1.2.5.2) are instances of discontinuous noun phrases. Within discontinuous noun phrases, modifiers tend to match the morphological properties of their head noun. This pattern is a comprehensive criterion to detect discontinuous noun phrases since modifiers otherwise do not exhibit inflectional morphology.

Noun phrases, determined by a demonstrative pronoun, do not seem to appear discontinuously in Dolgan. Case-marked demonstrative pronouns do not occur either when modifying a noun, but only in elliptic contexts and quasi lexicalized forms such as *on-ton* 'that-ABL' = 'then'. Bare demonstrative pronouns, in turn, are very often used as filler words, occurring everywhere in the clause. Therefore, it is unlikely that they, in fact, modify a noun phrase in the clause.

Noun phrases, modified by adjectives, neither appear discontinuously in the analyzed material. Indeed, adjectives may occur without a head noun and be case marked, but these are rather instances of ellipsis than of discontinuity. Also, seemingly discontinuous noun phrases with a degree adverb intervening between the adjective and the head noun ((476), see Section 7.2 for details) are, in fact, not discontinuous since the head noun is still in its original position.

- (476) [...] *ulakan bagaji čok hit-ar e-t-e.*
 big very coal lie-PTCP.PRS AUX-PST1-3SG
 ‘[Then I went], a big [piece of] coal was lying there.’
 (KuDP_2009_Fire_nar.006)

Possessors modifying a noun phrase, in turn, behave inconclusively depending on the form of the possessor. Full noun phrases, eventually marked with the genitive case, do not appear non-adjacently to their head noun. Personal pronouns, functioning as possessors, also clearly tend to stand adjacently to their head noun. Only a few, not entirely comprehensive examples of a discontinuous realization could be found. Example (477) exhibits the emphatic particle *būllagina* realized between the possessor and the head noun. Possessive pronouns, in contrast, quite frequently appear in a discontinuous noun phrase. Thereby, they can simply be placed directly after their head noun (478), or even other constituents, not belonging to the noun phrase, may intervene (479).

- (477) *Min būllagina törüt-üm,* [...] .
 1SG.PRO though **lineage-POSS.1SG**
 ‘But my family, [my own family is broad].’
 (ZhNA_KuNS_20XX_LifeAndMusic_conv.ZhNA.001)
- (478) *Tete-m minîene biêk axo:tn'ik-ribak*
 father-POSS.1SG **my** always hunter.R-fisherman.R
 e-t-e, [...] .
 be-PST1-3SG
 ‘My father was always a hunter and a fisherman, [he was a reindeer herder].’
 (PoPD_KuNS_2004_Life_conv.PoPD.002)
- (479) *D'ol-gut būl-lag-a ehîene* [...] .
 luck-POSS.2PL be-INFR-3SG **your.PL**
 ‘You are apparently lucky [to have seen me].’
 (YaP_1930_GroomFromUpperWorld_flk.012)

Discontinuous noun phrases containing quantifiers occur, as shown in Section 7.1.2.5. Most frequently, postnominal *barita* is realized discontinuously, whereby it syntactically is analyzed as a floating quantifier. Other quantifiers such as *elbek* ‘many’ or *ügüs* ‘much’ can be separated from their head noun, too, but this is much less frequent. Numerals, however, do not appear in discontinuous noun phrases. Admittedly, elliptic constructions with a numeral without its head do occur, but these are not discontinuous in a sense discussed here. Structures with the postposition *taksa* ‘over; more than’ (480) are neither discontinuous noun phrases since the numeral and the postposition still stand in the expected prenominal position.

- (480) *Hürbe-tten taksa kihi-ni tüh-er-di-ler.*
 twenty-ABL more.than human-ACC fall-CAUS-PST1-3PL
 ‘More than twenty people were shot down.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.047)

As described in Section 7.1.2.6, relative clauses form so-called heavy NPs when modifying a noun. In this case, the participle behaves like a modifying adjective. This pattern would suggest that relative clauses cannot be realized discontinuously since adjectives cannot either. However, relative clauses do occur in discontinuous noun phrases. Then the participle within the relative clause agrees with its head noun. Example (481) is very comprehensive in this respect since it includes two relative clauses, out of which one is realized prenominally and the other discontinuously. The participle in the prenominal clause does not agree with the head noun, but the participle in the postnominal agrees in case and number. Moreover, a clear intonational break can be heard between the head noun and the postposed relative clause, which also serves as an argument for analyzing the noun phrase as discontinuous.

- (481) *Ebe-ni taks-ar mosti-lar-i (PAUSE) küniüs*
 river-ACC go.out-PTCP.PRS bridge.PL.R-PL-ACC by.day
oñor-or-butun [...].
 make-PTCP.PRS-POSS.1PLACC
 ‘The bridges crossing the river, which we were repairing by day, [were destroyed, when aircrafts of the Germans came and released some bombs].’
 (MiXS_1967_SoldierInSecondWorldWar_nar.051)

To sum up, noun phrases may be discontinuous in Dolgan, but it depends on the category of the modifier involved. Discontinuous noun phrases are possible

with quantifiers and relative clauses but not with modifying adjectives and numerals. Modifying possessors take an intermediate stage: Full noun phrases and personal pronouns do not occur discontinuously, but possessive pronouns do. Generally, in discontinuous noun phrases, morphological matching of the head noun and the discontinuous modifier appears; that is, they agree in case, number and eventually possession.

7.1.4 Coordination of Noun Phrases

Noun phrases can be coordinated in various ways in Dolgan. The easiest and most frequent way is the simple juxtaposition of the given noun phrases, that is, asyndetic coordination without a linking element.

- (482) *Nel'ma-lar, muksu:t-tar, o:mul-lar kuturuk-tari-nan*
nelma-PL muksun-PL Arctic.cisco-PL tail-POSS.3PL-INS
oks-ūōl-u: hip-pit-tar lūōtka-lar
 beat-ITER-CVB.SIM lie-PST2-3PL boat-PL
is-teri-ger.
 inside-POSS.3PL-DAT/LOC
 'Nelmas, muksuns and Arctic ciscos were lying in the boats and beating
 with their tails.'
 (PoNA_19910207_Fishing_nar.201)

Coordination with the help of conjunctions, in turn, is relatively infrequent. Here, the items *da: ~ da* 'and' as well as *onton* 'then; and' appear. Stapert (2013: 278–282) has shown that the conjunction *ūōnna*, frequently occurring in Sakha, does not appear in Dolgan speech. This can be supported by the material analyzed here. Only a handful of instances, all of them in the edited volume *Folklor Dolgan* (Efremov 2000), could be found. The conjunctions *da: ~ da* and *onton* behave differently from a syntactic point of view. The item *da: ~ da*, originally an additive and emphatic particle (see Section 3.8), appears after each coordinated constituent (483). The observed syntactic pattern points to the item's origin since emphatic particles occur in the same place concerning the item they modify. In turn, the item *onton*, which is the petrified ablative case form¹ of the demonstrative pronoun *ol* (see Sections 3.6.3 and 5.2.3), appears between the two coordinated constituents (484).

1 Interestingly, in one single text (PoNA_200X_GirlFromTundra_nar) also the petrified locative case form *onno* is used in this function. However, this seems to be an exceptional pattern since the same speaker uses the form *onton* in other texts regularly.

- (483) [...] *tü:n da, künü:s da îald'it kel-lin.*
 at.night **and** by.day **and** guest come-IMP.3SG
 'They care of a guest, feeding and warming him], the guest may come
 at night and by day.'
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.025)
- (484) [...]. *Di:ma onto:n Mi:ka.*
 Dima **and** Mika
 '[With whom do you go to the tundra?]'—'[With] Dima and Mika.'
 (AnIM_AnMSp_2009_Holiday_conv.AnMSp.003)

Finally, noun phrases can be coordinated with constructions expressing accompaniment. First, structures including the postposition *gitta ~ kitta* 'with' are applicable in this context. The postposition *gitta ~ kitta* is placed after the first noun phrase, governing accusative case marking of the latter (485). Second, the propriative suffix -LA:K (see Section 12.1.2) coordinates noun phrases, attaching to the first noun phrase (486). Much less frequently, the derivational sociative suffix -LI:N occurs (see Sections 4.2 and 12.1.1 for a thorough description). Here, the suffix -LI:N is attached to both noun phrases, which eventually may be further inflected for case and number ((487) and (488)).

- (485) *On-tu-ŋ ani ikki ogo-lo:k, uōl-u gitta*
 that-POSS.3SG-POSS.2SG now two child-PROPR.3SG boy-ACC with
ki:s.
 girl
 'Now she has two children, a son and a daughter.'
 (KiES_KiLS_2009_Life_nar.KiES.062)
- (486) *Ta:j-ba-tak-pina mo:j-do:k bas-pin*
 guess-NEG-COND-1SG neck-PROPR head-POSS.1SG.ACC
bih-îak buōl-l-a.
 cut-PTCP.FUT AUX-PST1-3SG
 'If I do not guess [the riddle], he will cut off my neck and my head.'
 (PoMA_1964_YoungCzar_flk.017)
- (487) *Emî kirba-bit, ogo-lu:n d'aktar-di:n kirba-bit.*
 again thrash-PST2.3SG child-soc woman-soc thrash-PST2.3SG
 'Again he thrashed [them], he thrashed child and wife.'
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.116)

- (488) *Tit-ti:m-min* *bagas-ti:m-min* *bih-a*
 larch-SOC-POSS.1SG.ACC EMPH-SOC-POSS.1SG.ACC cut-CVB.SIM
oks-on [...].
 beat-CVB.SEQ
 'It will chop my larch and everything completely, [it wants to eat me].'
 (UkET_2002_FoxJayBuzzard_flk.032)

Coordinated noun phrases can fulfil all kinds of syntactic functions. In Chapter 8, their syntactic patterns, such as their agreement with the predicate, are discussed.

Given this, the coordination of noun phrases is a domain in which Dolgan clearly differs from Sakha. Whereas in Dolgan, noun phrases are most often coordinated by the items *da:* ~ *da* 'and' as well as *onton* 'then; and', it is the comitative case -LI:N as well as the conjunction *uōnna* 'and', which are frequently used in Sakha (Ubrjatova et al. 1982: 131–133, 467).

7.2 Adjective Phrase

Adjective phrases have an adjective as their head, not being very complex in Dolgan. Beneath the head adjective, there may be modifying particles and adverbs, especially degree adverbs. However, in most cases, the adjective has neither complements nor modifiers.

The degree adverbs *bagaji* ~ *bagaj* (489) and *mija:* ~ *min'a:* ~ *muja* ~ *mun'a* (490), both meaning 'very; to a high degree', stand after the adjective they modify. The former adverb is used very frequently in both varieties of Dolgan, whereas the latter adverb is used less regularly and only in Upper Dolgan.

- (489) *Ulakan bagaj gast'in'isa-ga* *d'ie-le:ti-ler,* [...].
 big very hotel-DAT/LOC house-VBZ-PST1-3PL
 'They accommodated [us] in a huge hotel, [its name was "Seven hills"].'
 (UkOA_2010_Festival_nar.UkOA.006)
- (490) *Emek mija: mas-ta* *egel-inj.*
 rotten very wood-PART bring-IMP.2PL
 'Bring completely rotten wood.'
 (BeAM_199X_HumanInLandOfDeath_flk.231)

Both adverbs are not inflected in these constructions since the whole adjective phrase modifies a noun. However, in syntactic positions calling for inflection,

the relevant affixes do not appear at the adjective itself but at the adverb. One appropriate context is non-verbal predication, more exactly predicate adjectives ((491), see Section 8.2.2), the other relevant context is a modified noun phrase with an empty head (492).

- (491) *Ani tot bagaj-bit, ičiges bagaj-bit.*
 now sated very-1PL warm very-1PL
 'Now we have enough to eat, and we are very warm.'
 (AnMS_1972_GoodSovietTimes_nar.047)
- (492) [...] *tug-u ere himnagas bagaji-ni tuttar-an*
 what-ACC INDF soft very-ACC hand-CVB.SEQ
ke:h-er.
 throw.AUX-PRS.3SG
 '[Then this woman] gives [him] something very soft.'
 (BaA_1930_FireInSmallTent_flk.033)

The particles *muŋ* and much less frequently *ha:maj* (< Russian *samyj*) are superlative particles. They always precede the adjective which is modified.

- (493) *Ogonn'or muŋ ötüö taba-lar-i-nan kötüt-en*
 old.man most good reindeer-PL-POSS.3SG-INS run-CVB.SEQ
kel-er.
 come-PRS.3SG
 'The old man came in a gallop with his best reindeer.'
 (SaSS_1964_NganasanBraveBoy_flk.105)

Finally, coordinated adjective phrases can express emphasis. In this case, the emphatic additive particle *da: ~ da* is used. In contrast to coordinated noun phrases (see Section 7.1.4), the particle appears only between the coordinated adjectives, like in example (494). However, this structure is rare in Dolgan speech and often occurs in folklore texts, where it almost appears to be a formula.

- (494) *U: ičči-te baj da baj.*
 water master-POSS.3SG rich and rich
 'The master of water is very rich.' (lit. 'The master of water is rich and rich.')
- (AkEE_19900810_PearlBeard_flk.026)

7.3 Verb Phrase

Verb phrases have a verb as their head and are thus organized according to the verb's argument structure. Therefore, in the following sections, the argument structure of verbs is the central issue of discussion (Section 7.3.1). After that, valence changing operations are touched upon, i.e. processes that change the verb's argument structure (Section 7.3.2). Moreover, verb phrases form the centre of verbal predications, which are dealt with in Section 8.1.

7.3.1 *Argument Structure*

The argument structure of a verb determines the participants included in an event as well as their semantic properties and syntactic functions. In Section 7.3.1.1, the concepts of valence and subcategorization are applied to Dolgan verbs and their argument structure. Sections 7.3.1.2 to 7.3.1.5 deal with different groups of verbs according to the number of arguments they call for.

7.3.1.1 Valence, Subcategorization and Transitivity

As it is widely known, the term *valence* originates in dependency grammar (Tesnière 1959), and finally, even in chemistry. Coming to verbs, the valence of a verb determines the number of arguments the verb takes, the verb *walk* being monovalent (one argument), the verb *kill* being bivalent (two arguments), and the verb *give* being trivalent (three arguments). In later works of dependency grammar, the semantic and syntactic properties of the verb's arguments are also touched upon. However, the main idea is still that the valence of a verb determines its potential to combine with other constituents, namely its arguments. The counterpart in generative syntax is the concept of *subcategorization* (see Adger (2003: Ch. 3 and 4) for a concise description). Roughly spoken, the subcategorization of a verb determines its complements as well as the latter's semantics and syntactic properties. The term *complement* is used since only those arguments are considered, which the verb governs. Consequently, the subject is systematically excluded from the subcategorization. This is due to the observation that subjects syntactically behave differently from other verb arguments. According to their subcategorization, verbs governing zero complements are called *intransitive*, those governing one complement are called *transitive*, and those governing two complements are called *ditransitive*. Both the structuralist and the generative approach to the verb's semantic and syntactic configuration have apparent advantages and disadvantages, but a discussion goes beyond the scope of this grammar.

Here, I will speak of verbal valence in the sense of dependency grammar but enlarging the concept by adding semantic features (*semantic roles*) and syn-

CHART 164 Argument structure of *ölör*- ‘kill’

<i>ölör</i> - ‘kill’	Semantic role	Syntactic function	Form of the referent
Argument 1	agent	subject	NP
Argument 2	patient	direct object	NP

tactic properties (*syntactic functions*) of the verb’s arguments. The argument structure of the Dolgan verb *ölör*- ‘kill’ can, thus, be schematized as in Chart 164.

Note that verbal valence may but need not correlate with the notion of transitivity. E.g., the verb *put* in English has three arguments (subject/agent, direct object/theme and adverbial/goal) but is transitive and not ditransitive since the third argument is an adverbial. Similarly, the verb *arrive* has two arguments (subject/agent, adverbial/goal) but is intransitive. Therefore, in this chapter, the term *valence* is preferred, whereas Section 8.1 about verbal predications is structured according to the notion of *transitivity*.

7.3.1.2 Zero-Argument Verbs

Zero-argument verbs do not call for any argument according to their argument structure. In Dolgan, such verbs are exclusively atmospheric/meteorological verbs like *hamirɔda*- ‘rain’ or *karɔnar*- ‘get dark’. These verbs have no argument, neither semantically nor syntactically, and form impersonal clauses (see Section 8.1.1). Note that zero-argument verbs neither call for an expletive pronoun in the subject position in Dolgan.

- (495) Čubu karɔnar-ia.
 soon get.dark-FUT.3SG
 ‘Soon, it will turn dark.’
 (AsKS_19XX_Amulet_nar.142)

In impersonal clauses, also other verbs can occur without any argument expressed (see examples (560) and (562) in Section 8.1.1). But those verbs are not analyzed as zero-argument verbs here since the given verb has arguments in its subcategorization, but these arguments are not realized due to pragmatic reasons.

7.3.1.3 One-Argument Verbs

One-argument verbs call for the realization of exactly one argument according to their subcategorization. From a syntactic point of view, the single argument

of such verbs is the subject of the clause, which agrees in person and number with the verbal predicate. As for its form, the subject is mainly a noun phrase but can also be replaced by a subject complement clause (see Section 9.3.1). One-argument verbs are, per default, intransitive since they cannot govern any further arguments beneath the subject.

From a semantic point of view, one-argument verbs do not form a uniform group. The single argument of the verb most often plays the semantic roles *agent*, *experiencer*, *patient* or *theme*. The semantic roles *agent* and *experiencer* correspond to the proto-agent role in Dowty's (1991: 572) sense, whereas the semantic roles *patient* and *theme* instead relate to the proto-patient role. The examples (496) to (499) illustrate all named semantic roles played by the single argument of a one-argument verb.

- AGENT
- (496) *Börö-tö tur-a ekkire:-bit.*
 wolf-POSS.3SG stand.up-CVB.SIM jump-PST2.3SG
 'The wolf jumped up.'
 (PoXN_19701118_Chopochuka_flk.046)

- EXPERIENCER
- (497) *D'on olus hana:rg-i:r.*
 people very worry-PRS.3SG
 'The people worry a lot.'
 (PoNA_19900810_TripToVolochanka_nar.083)

- PATIENT
- (498) *Er-im öl-büt-e biliri:n.*
 husband-POSS.1SG die-PST2-3SG last.year
 'My husband died last year.'
 (BoND_1964_ThreeBrothers_flk.028)

- THEME
- (499) *Ūol üs kün-ü utuj-d-a.*
 boy three day-ACC sleep-PST1-3SG
 'The boy slept for three days.'
 (AkEE_19XX_BoySister_flk.187)

Apparently, the agent subject in example (496) is a more "prototypical" subject than the patient subject in example (498). This is because the verb *öl-* 'die' has a transitive counterpart (*ölör-* 'kill'), which the verb *ekki:-* 'jump' lacks. The first

argument of *öl-* ‘die’ and the second argument of *ölör-* ‘kill’ share the semantic roles they play but differ in their syntactic realization. The former is realized as a subject, but the latter as a direct object. Due to this divergence of semantics and syntax, verbs such as *öl-* ‘die’, *uhugun-* ‘wake up’, *tüs-* ‘fall’ are called unaccusative verbs. Verbs such as *ekkire-* ‘jump’, *utuɟ-* ‘sleep’, *kir-* ‘shamanize’ are called unergative verbs (see Perlmutter 1978 for details).

The syntactic behaviour of unaccusative and unergative verbs in Dolgan is not fully understood yet. Two features, however, seem to allow a distinction between these two groups. First, unaccusative verbs tend to form the postterminal past participle -BIT in modifier position, whereas unergative verbs do not according to the corpus data analyzed. The phrase *öl-büt kihi* ‘die-PTCP.PST human’ = ‘died person’ is completely grammatical and often attested, but the grammaticality of phrases like **kir-bit kihi* ‘shamanize-PTCP.PST human’ = ‘person who has shamanized’ appears to be at least doubtful. Second, unaccusative verbs allow for double causative constructions, whereby the first causative transitivity the verb and the second causative expresses “real” causation, cf. examples (500) and (501). On the contrary, unergative verbs do not allow for double causative constructions. This constraint is because the first causative cannot transitivity the verb in the same way as it is possible for unaccusative verbs but would yield structures of the type “W causes X to cause Y to do Z”.

- (500) *Urut iti böör-nü itte öl-ör-tör-ö:ččü*
 earlier that wolf-ACC EMPH die-CAUS-CAUS-PTCP.HAB
e-ti-lerē būō, iē.
 AUX-PT1-3PL EMPH AFF
 ‘Earlier one might hunt the wolf, right.’
 ~ lit. ‘Earlier they made/caused to kill the wolf, right.’
 (ChSA_KuNS_2004_ReindeerHerding_conv.KuNS.007)

- (501) *Tug-u ta:t-tar-ar ol?*
 what-ACC realize-CAUS-CAUS-PRS.3SG that
 ‘What does he make [you] guess?’
 (PoMA_1964_YoungCzar_flk.018)

The discussion of unaccusative and unergative verbs leads to four further groups of one-argument verbs in Dolgan: passive, reflexive, middle, and reciprocal verbs. These verbs are discussed in detail in the context of valence decreasing operations (Section 7.3.2.2).

To sum up, one can say that one-argument verbs in Dolgan have subjects as their single argument. Thereby, unaccusative and unergative verbs have to

be distinguished since they behave differently from a syntactic point of view. Semantically, the single argument of these verbs most often plays the semantic roles of *agent*, *experiencer*, *patient* or *theme*.

7.3.1.4 Two-Argument Verbs

Two-argument verbs are bivalent, i.e. they call for the realization of two arguments. Thereby, they can be transitive or intransitive, depending on whether the second argument is an object or not. First, transitive two-argument verbs are dealt with, and afterwards, intransitive two-argument verbs.

Transitive two-argument verbs syntactically call for the realization of a subject and an object. Both participants are usually formed by noun phrases but can also be replaced by complement clauses (see Section 9.3.1). The semantics of the arguments of two-placed verbs is again more complex. The subject argument most often plays a semantic role, subsumed under the notion proto-agent, whereas the object argument plays a semantic role, subsumed under the notion proto-patient (see Dowty (1991: 571–575) for details). Thus, prototypical two-argument verbs have an agent as their subject and a patient as their object, e.g. *ölör*- ‘kill’ or *hiē*- ‘eat’ (502).

- | | | | | |
|-------|--|--|----------------------|---------------|
| | PATIENT | | [AGENT] ² | |
| (502) | <i>Ikki ogo-tun</i> | | <i>hiē-bit</i> – | <i>hahil.</i> |
| | two child-POSS.3SG.ACC | | eat-PST2.3SG | fox |
| | ‘It ate two of its children, the fox.’ | | | |
| | (UkET_2002_FoxJayBuzzard_flk.021) | | | |

Very closely related, but not similar, are two-argument verbs with an agent as their subject and a theme as their object, e.g. *ilt*- ‘carry’ or *kördö*- ‘search’ (503). Both structures resemble each other but differ to some extent: Whereas a patient argument is directly affected by the performed action and changes its state, a theme argument’s state remains unchanged.

- | | | | |
|-------|---------------------------------------|----------------|-------------------|
| | AGENT | THEME | |
| (503) | <i>Min</i> | <i>enigi-n</i> | <i>körd-üö-m.</i> |
| | 1SG.PRO | 2SG.PRO-ACC | search-FUT-1SG |
| | ‘I will search for you.’ | | |
| | (AkEE_19900810_ReindeerMouse_flk.006) | | |

2 Square brackets indicate the covert realization of the given referent. Here, this is assumed, since the postponed *hahil* ‘fox’ is intonationally clearly separated from the clause, and does, thus, not form part of the clause itself.

The same pattern is observed with perceptual verbs like *ihiller*- ‘listen’ or *odula*- ‘watch’, which describe events that the first participant performs actively and voluntarily (504). Perceptual verbs like *ihit*- ‘hear’, *kör*- ‘see’, and emotional verbs like *bagar*- ‘love; like’ exhibit the same syntactic realization, but their semantics differ. The first argument of these verbs plays the semantic role of an *experiencer*, and the second argument plays the semantic role of a *stimulus* ((505) and (506)). The main difference is that the first participant of the event does not act voluntarily, so they cannot influence their sensual impression. Therefore, it can also be debated whether the semantic role of an *experiencer* is indeed an instance of a proto-agent role and the semantic role of *stimulus* an instance of a proto-patient role. This discussion, however, goes far beyond the scope of this grammar.

- | | | | | |
|-------|---|---------------------|--------------------|-----------------------|
| | AGENT | | | THEME |
| (504) | <i>Tojo:</i> | <i>olus odul-u:</i> | <i>tur-but</i> | <i>d'aktat-tar-i.</i> |
| | Tojoo | very watch-CVB.SIM | stand.AUX-PST2.3SG | woman-PL-ACC |
| | ‘Tojoo was watching the women very [thoroughly].’ | | | |
| | (PoNA_19900810_TojooInVolochnanka_nar.022) | | | |

- | | | | |
|-------|--|----------------|---------------------------|
| | EXPERIENCER | STIMULUS | |
| (505) | <i>Min</i> | <i>bu öh-ü</i> | <i>isti-bit-im, [...]</i> |
| | 1SG.PRO | this story-ACC | hear-PST2-1SG |
| | ‘I heard this story [when with my parents ...].’ | | |
| | (NaLE_2002_StonyBone_flk.001) | | |

- | | | | |
|-------|--|-----------------|-----------------------|
| | STIMULUS | [EXPERIENCER] | |
| (506) | <i>Üle-bin</i> | <i>bagar-ar</i> | <i>e-ti-m tak_ta.</i> |
| | work-POSS.1SG.ACC | like-PTCP.PRS | AUX-PST1-1SG EMPH.R |
| | ‘I liked my work, though.’ | | |
| | (BeEI_KuNS_1998_Teacher_conv.BeEI.137) | | |

When it comes to intransitive two-argument verbs, one can first say that the first argument of the verbs is still obligatorily the subject of the clause. Semantically, it may play various semantic roles, both proto-agent and proto-patient roles in Dowty’s (1991) sense, but more often agent-like roles. A relatively big group is formed by verbs expressing movement or stative location. Motion verbs have an agent subject as the first argument, whereas the second argument is an adverbial, which plays the semantic roles of *goal* (507) or *source* (508). Formally, this adverbial is mostly a noun phrase but can also be an adpositional phrase. It could be argued that the sentences would be grammatical

without the second argument, too, whence the latter would—strictly spoken—bear no argument status. However, it has to be taken into account that local adverbials are more tightly bound to verbs like *bar-* ‘go’ or *ara:k-* ‘go away; separate’ than to verbs like *illa:-* ‘sing’ or *öl-* ‘die’. Therefore, they are analyzed here as arguments of the former verbs.

- (507) AGENT GOAL
D'e araj bu kihi-ŋ Li:pirda:ŋ-ŋa bar-d-a.
 well only this human-POSS.2SG Lyypyrdaan-DAT/LOC go-PST1-3SG
 ‘Well, this human went to Lyypyrdaan.’
 (ChuAE_1968_Lyypyrdaan_flk.045)

- (508) AGENT SOURCE
 [...] *min ani jon-ton arag-iâ-m huôg-a.*
 1SG.PRO now people-ABL separate-FUT-1SG NEG-3SG
 ‘So I won’t separate from [my] people now.’
 (BeAM_199x_HumanInLandOfDeath_flk.285)

The verb *bat-* ‘fit’ adheres to the same syntactic pattern. However, its first argument does not play the semantic role *agent* but rather the role *theme*.

- (509) THEME GOAL
Til-a [...] an'ag-i-gar bap-pat.
 tongue-POSS.3SG mouth-POSS.3SG-DAT/LOC fit-NEG.PRS.3SG
 ‘[Out of thirst and his body warmth] his tongue does not fit into his mouth.’
 (AsKS_19xx_Amulet_nar.017)

Verbs expressing stative location have an agent (510) or a theme (511) as the first argument, realized as the subject. Their second argument, playing the semantic role *locus ~ location*, is syntactically an adverbial. Formally, the adverbial is often a noun phrase but can also be an adpositional phrase. Relevant verbs can be common posture verbs as *olor-* ‘sit’ or *tur-* ‘stand’, but also less common verbs like *ka:l-* ‘stay’ and *d'îele:- ~ d'îelen-* ‘settle; reside’.

- (510) LOCATION [AGENT]
Hinda:ska-ga ka:l-bit-tara ani, [...].
 Syndassko-DAT/LOC stay-PST2-3PL now
 ‘Now they stayed in Syndassko, [they will go in May when school has finished].’
 (KiES_KiLS_2009_Life_nar.KiES.065)

- | | LOCATION | | THEME |
|-------|--|------------------------|-------------|
| (511) | <i>Hirga d'îe-ge</i> | <i>d'îe-lem-mit-im</i> | <i>min.</i> |
| | sledge house-DAT/LOC | house-VBZ-PST2-1SG | 1SG.PRO |
| | 'I started to live in a sledge house.' | | |
| | (BeEI_KuNS_1998_Teacher_conv.BeEI.024) | | |

Apart from verbs expressing movement and stative location, there is a handful of intransitive verbs, whose first argument is the agent subject and whose second argument is an adverbial playing some different semantic role. The most frequent verb of this group is *kömölös-* 'help', whose second argument plays the semantic role of a *beneficiary* (512). A not very frequent but peculiar verb is *ha:ktar-* 'excrete; defecate': Its second theme-like argument is realized as an adverbial, formed by a noun phrase marked with the instrumental case (513).

- | | AGENT | BENEFICIARY | |
|-------|--|-----------------|----------------------------|
| (512) | <i>Min</i> | <i>en'îe-ke</i> | <i>kömölöh-üö-m, [...]</i> |
| | 1SG.PRO | 2SG.PRO-DAT/LOC | help-FUT-1SG |
| | 'I will help you, [I will make you a storeroom out of hay].' | | |
| | (ErSV_1964_WarBirdsAnimals_flk.027) | | |

- | | THEME | [AGENT] |
|-------|---|---------|
| (513) | [...] <i>kihil kömüs agaj karči-nnan ha:ktar-čči.</i> | |
| | red silver only money-INS defecate-HAB.3SG | |
| | '[There will be again a box, plated with gold, inside of this box there is a golden hen], it excretes only golden money.' | |
| | (ErSV_1964_WarBirdsAnimals_flk.286) | |

The named verbs do not form an exhaustive list but serve as examples for intransitive two-argument verbs since this group of verbs is often disregarded. Finally, the assumed argument status of adverbials needs justification. Besides the theoretical arguments of Larson (1988), Stroik (1990) and Apresjan (1992), one crucial linguistic argument is observed in the studied material favouring this analysis. In maximally focused sentences with a non-topical subject (see Section 10.2 for details), adverbials having argument status appear between the subject and the verb (514), whereas circumstantial adverbials appear before the subject (515). Since information structural processes do not play a role in these examples for the word order inside the VP, it can be assumed that the verb-adjacent position of *hirge* in example (514) is due to its argument status.

- AGENT GOAL
- (514) *Bilir bir it-ta:k kihi hir-ge bar-bit.*
 once one dog-PROPR human tundra-DAT/LOC go-PST2.3SG
 'Long ago, one man with dogs went into the tundra.'
 (BaRD_1930_HairyPeople_flk.001)

- AGENT
- (515) *Kihin bajgal-ga d'ura:k-tar bölüge-le:-čči-ler.*
 in.winter sea-DAT/LOC Nenets-PL beluga-VBZ.CAPT-HAB-3PL
 'In winter, the Nenets people hunt belugas on the sea.'
 (BaA_1930_OneEyedGirl_flk.002)

7.3.1.5 Three-Argument Verbs

Three-argument verbs are trivalent, calling for the realization of three arguments. The most common representatives of three-argument verbs are ditransitive verbs, exhibiting one subject playing the semantic role of *agent* and two objects playing the semantic roles of *theme* and *recipient*. All arguments are formally noun phrases, marked with the nominative, accusative, and dative-locative cases. Example (516) shows the trivalent and ditransitive verb *bîer*- 'give'; similarly behaving verbs are in certain contexts e.g. *egel*- 'bring' or *tuttar*- 'hand'.

- | | RECIPIENT | [AGENT] | THEME | |
|-------|---|----------------|--------------|-------------|
| (516) | <i>Ol ik-ka</i> | <i>bîer-er</i> | <i>tug-u</i> | <i>ere.</i> |
| | that dog-DAT/LOC give-PRS.3SG what-ACC INDF | | | |
| | 'She gives something to the dog.' | | | |
| | (BeAM_199X_HumanInLandOfDeath_flk.158) | | | |

Apart from such verbs expressing physical transfer, verbs expressing mental transfer like *dîe*- 'say', *hanjar*- 'speak; say', *et*- 'speak; say' and *kepse*- 'tell' are, as a rule, trivalent and ditransitive like in example (517). However, as shown in detail in Sections 7.3.2.3 and 8.1.4, the recipient/addressee can also be promoted to the second argument, primarily when direct speech follows. Then, these verbs do not behave like trivalent and ditransitive verbs anymore, but like bivalent and monotransitive verbs.

- (517) AGENT THEME
Dogot-tor-o da tūōg-u da dīe-bet-ter
 friend-PL-POSS.3SG EMPH what-ACC INDF say-NEG.PRS-3PL
 RECIPIENT/ADDRESSEE
e-bit ginīe-ke.
 AUX-PST2.3SG 3SG.PRO-DAT/LOC
 ‘His friends didn’t even say something to him.’
 (PoNA_19900810_Tojo0InVoloChanka_nar.091)

Similarly to bivalent intransitive motion verbs, a couple of trivalent monotransitive verbs express the caused movement of a referent. These verbs have an agent subject (causing the movement) as the first argument, a theme object (which is moved) as the second argument, and an adverbial expressing the goal of movement as the third argument. Verbs belonging to this group are, e.g. *as-* 'push' (518), *ur-* 'lay; put' (519), or *ilt-* 'carry; bring'.

- (518)

	THEME	GOAL	[AGENT]
	<i>Onton mah-i il-la</i>	<i>ka:r-ga</i>	<i>as-t-a.</i>
	then wood-ACC take-PST1-3SG	snow-DAT/LOC push-PST1-3SG	
	‘Then he took the piece of wood and pushed [it] into the snow.’		
	(AkEE_19xx_BoySister_flk.149)		

- (519) [...] *kim tohogo u:r-but-tar tîa-ga.*
 who.PH birth.pole put-PST2-3PL tundra-DAT/LOC
 ‘[According to my mother, when I was born, when I was born], they put
 a whatchamacallit, a birth pole into the tundra.’
 (KILS_KIES_2009_Life_nar.KiLS.006)

Finally, the trivalent verb *a:tta*- 'name' is worth mentioning since its argument structure exhibits a peculiarity. The verb is transitive, with an agent subject as the first argument and a theme object as the second argument. Its third argument is an adverbial clause, obligatorily formed by the sequential converb form of *diē*- 'say'. The semantic role of this argument can maybe be called *translative* or alike; in any case, it expresses the name given to the referent expressed by the second argument.

- (520) *Ol ihin ogonn'or-u a:t-ta:-bit-tar*
 that because.of old.man-ACC name-VBZ-PST2-3PL
 TRANSLATIVE(?)
"Oguriŭ Bitik" diē-n.
 beads beard say-CVB.SEQ
 'Therefore, they called the old man "Pearl Beard".
 (AkEE_19900810_PearlBeard_flk.005)

To sum up, it can be said that three-argument verbs in Dolgan are ditransitive (verbs expressing physical or mental transfer) or monotransitive (verbs expressing caused motion). The analyzed material did not reveal any intransitive three-argument verbs, which, however, does not entirely exclude the possibility of their existence. As for their syntax, three-argument verbs always have a subject as the first argument and an object as the second argument. The third argument can also be an object which has been convincingly shown, e.g. by Larson (1988). As for adverbials as third arguments, the same argumentation presented for obligatory adverbials of two-argument verbs can be adopted (see Section 7.3.1.4).

7.3.2 Valence Changing Operations

7.3.2.1 Valence Increasing Operations

Valence increasing operations add an argument to the subcategorization of a verb, whereby the most common structures are causatives (Payne 1997: 175–177). As described in Section 12.4, there are various derivational suffixes in Dolgan, which express causatives. Here, only the syntactic patterns of causatives are described; for the form of the suffixes, see the relevant section in Chapter 12.

When causative suffixes are added to intransitive verbs, the verb is transitivized. As for the semantic roles included, two groups of verbs are to be distinguished: The first group contains mostly unergative verbs, whose single argument plays a proto-agent role. The second group has mostly unaccusative verbs, whose single argument plays a proto-patient role. When a causative suffix (mostly -TAr) is added to an unergative verb, the emerging verb's first argument plays the semantic role of a *causer*, whereas its second argument keeps playing the agent-like semantic role. The transitivization/causativization of the verb *kir-* 'shamanize' means that some person causes another person to shamanize, but not that the first person has the second person as "target" of shamanizing (521).

AGENT

- (521) a. *D'e bu ojun-uy ki:r-i:hi.*
 well this shaman-POSS.2SG shamanize-PROB.3SG
 'Well, the shaman was about to shamanize.'
 (BeAM_199X_HumanInLandOfDeath_flk.228)

CAUSEE = AGENT

- b. *Ol üs tögül ojun-u*
 that three time shaman-ACC
 [CAUSER]
ki:r-dar-bit, [...] *[...]*
 shamanize-CAUS-PST2.3SG
 'Three times he let shamans shamanize, [it did not help].'
 (BaRD_1930_MasterOfWorld_flk.013)

In contrast, when a causative suffix (mostly *-r* or *-t*) is added to an unaccusative verb, the emerging verb's first argument plays the semantic role *agent*, whereas its second argument keeps playing a patient-like role. The transitivization/causativization of the verbs *öl-* 'die' and *olor-* 'sit', thus, means that some person kills and seats another person ((522) and (523)).

- (522) a. *Bari-ta öl-büt-ter.*
 all-POSS.3SG die-PST2-3PL
 'They [= Dolgans in Potapovo] have all died.'
 (SuON_KuNS_19990303_HardLife_conv.SuON.122)

"CAUSER" = AGENT "CAUSEE" = PATIENT

- b. *Ogonn'or taba-tin*
 old.man reindeer-POSS.3SG.ACC
öl-ör-ön ke:s-pit.
 die-CAUS-CVB.SEQ throw.AUX-PST2.3SG
 'The old man killed the reindeer.'
 (BeVP_1970_Laajku_flk.020)

THEME

- (523) a. [...] *bu olor-or ogo-to.*
 this sit-PRS.3SG child-POSS.3SG
 '[Her child is here], her child sits here.'
 (KuSE_2009_Family_nar.KuSE.012)

- (525) CAUSEE = AGENT [CAUSER]
Maynəj kuzn'es-tar-ga oŋor-tor
 at.first blacksmith-PL-DAT/LOC make-CAUS.IMP.2SG
 PATIENT PATIENT
tarba-h-ar tarbak-ta, tig-ar halka-ta.
 scrape-COOP-PTCP.PRS claw-PART nut-PTCP.PRS hammer-PART
 'At first, let blacksmiths make you a scraping claw, a nutting hammer.'
 (PoNA_19900322_PoorBoyDevil_flk.032)

- (526) THEME [CAUSER]
Tug-u illa-t-a-gin iti
 what-ACC sing-CAUS-PRS-2SG that
 CAUSEE = FORCE(?)
pat'efoŋ-ŋa-r?
 gramophone-POSS.2SG-DAT/LOC
 'What are you spinning there on the gramophone?' ~
 lit. 'What do you let the gramophone sing?'
 (LaVN_KuNS_1999_MusicRepressions_conv.LaVN.013)

In this construction, both the agent-like causee (527) and the theme- or patient-like argument (528) can be omitted if they are retrievable from the context.

- (527) PATIENT CAUSER
Muŋsta-ni hu:nnar-tar-a:čči e-ti-ler ol ulakan
 floor-ACC wash-CAUS-PTCP.HAB AUX-PST1-3PL that big
pekar'-dar.
 baker-PL
 'The old bakers made [us] clean the floor.'
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.021)

- (528) CAUSEE = AGENT [CAUSER]
"[...] ulakan oju:ŋ-ŋa tilin-ner-ŋe-m", d-i:r.
 big shaman-DAT/LOC revive-CAUS-FUT-1SG say-PRS.3SG
 "[I will always take my daughter with me, she will revive], I will make
 the big shaman revive [her]", he says.'
 (BaRD_1930_DaughterOfNganasan_flk.005)

From a syntactic point of view, the first construction (524) effectively does not seem to be a valence increasing operation since a third theme- or patient-like argument is missing. The second construction can be analyzed as double

object construction in Larson's (1988) sense. Whether there are functional differences between the two structures—apart from the omission of a patient-/theme-like argument—cannot be answered at the moment. Example (529) stands to reason that this is not the case since both constructions appear in one single utterance. In either case, *ûôt* 'fire' is the agent of the event, but in the first clause, it exhibits dative-locative case marking, and in the second clause, it exhibits accusative case marking. However, it can be once more shown that in the first clause, a patient appears, but in the second clause, not.

- PATIENT CAUSEE = AGENT [CAUSER]
- (529) [...] *uska:n-i ûôk-ka aha-t-ar,*
 hare-ACC fire-DAT/LOC eat-CAUS-PRS.3SG
 CAUSEE = AGENT [CAUSER]
 ûôt-u emîe aha-t-ar.
 fire-ACC again eat-CAUS-PRS.3SG
 'Then, having taken the hare], she gives the hare to the fire to eat, she
 feeds the fire again.'
 (SuAA_20XX_Birth_nar.051)

In the case of the verbs *ahat*- 'feed; give to eat' (< *aha*- 'eat') and *ihér*- 'water; give to drink' (< *is*- 'drink'), also instrumental case marking of the patient argument can be observed. I tentatively suggest Russian influence here since the Russian counterparts *kormit* 'feed; give to eat' and *poit* 'water; give to drink' also govern the instrumental case of the patient argument. As instrumental case marking of patient- or theme-like arguments cannot be observed with other verbs in Dolgan, this seems to be a plausible explanation for instances like example (530).

- PATIENT AGENT = CAUSEE [CAUSER]
- (530) *Aragi-nan taba-ni aha-p-pat-tar,* [...].
 alcohol-INS reindeer-ACC eat-CAUS-NEG.PRS-3PL
 'One does not feed the reindeer with alcohol, [the reindeer eat only
 from the ground].'
 (KiPP_2009_Story_nar.KiPP.028)

7.3.2.2 Valence Decreasing Operations

Valence decreasing operations cause the reduction of the number of arguments of a verb. The most common types of valence decreasing operations are reflexives, middles, reciprocals and passives (Payne 1997: 196–209).

The central feature of reflexive constructions is that the agent-like argument and the patient-like argument are co-referential. Therefore, the semantic valence of the given verb is reduced by one (Payne 1997: 198), which is most often transferred to its syntactic realization. In this case, reflexives are formed by the derivational suffixes *-(I)IIN* and *-n* (see Section 12.4). More seldom, reflexives can be expressed analytically, in which case the syntactic valence of the given verb does not change. The former pattern is displayed by example (531), the latter pattern by example (532).

- AGENT = PATIENT
- (531) [...] *min olus bih-ilin-ni-m.*
 1SG.PRO very make.dirty-REFL-PST1-1SG
 ‘[Because of your badness] I made myself very dirty.’
 (PoNA_2004_MikaMukulajAloneAtHome_nar.067)
- THEME [AGENT]
- (532) *Beje-lerin at-tan-al-lar “tîa kihi-ler-e”*
 self-POSS.3PL.ACC name-VBZ-PRS-3PL tundra human-PL-POSS.3SG
dîe-n.
 say-CVB.SEQ
 ‘They call themselves “tundra people” [= Dolgans].’
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.079)

Middle constructions are both formally and functionally similar to reflexive structures. Prototypically, middle verbs are formed from transitive verbs and express that the given event has no concrete causer. Consequently, the verb’s valence is reduced by one. The single argument of the verb plays a patient-like semantic role, whereas no agent-like argument is expressed.

- THEME
- (533) *Pluôt bild’a-m-mît huga:-ka.*
 raft take.away-MID-PST2.3SG pancake.ice-DAT/LOC
 ‘The raft got stuck in the pancake ice.’
 (AsKS_19XX_Amulet_nar.200)

Middle verbs can also express that the first argument of a verb plays the semantic roles of both an agent and a beneficiary. This pattern, however, is no instance of a valence decreasing operation since the verb’s argument structure is not changed. In example (534), the verbs have an agent and a patient argument, each realized as the subject and the direct object, respectively. The

middle suffix only indicates that the people referred to perform the actions for their own benefit.

- AGENT = BENEFICIARY PATIENT
 (534) *Kim balik ira:sta-n-ar,*
 who fish clean-MID-PRS.3SG
 AGENT = BENEFICIARY PATIENT
kim d'ukula kur-d-un-ar.
 who dried.fish get.dry-CAUS-MID-PRS.3SG
 'Some of them are cleaning fish for themselves, some are drying fish for themselves.'
 (PoNA_1970_NeverSeenBird_nar.007)

Reciprocal constructions include a transitive verb, whose first and second arguments refer to the same set of referents. Thereby, the referents perform the given action mutually, i.e. they act on each other. In example (535), either referent loves and is loved, thus either plays both semantic roles included (experiencer for the first argument, stimulus for the second argument). Structurally, there exists the possibility to express reciprocity with the help of the reciprocal pronoun *beje beje* (see Section 3.3.2.2). In this structure, the verb appears as a transitive verb (like in the second clause of example (535)). More often, however, the verb itself is an intransitive derivate of a transitive verb, which calls for the realization of one single subject argument like in the first clause of example (535).

- EXPERIENCER/STIMULUS
 (535) [...] *bihigi domnuŋ-ŋu-ttan*
 1SG.PRO long.ago-ADJZ-ABL
 THEME
bagar-s-a-bit, beje-beje-bitin hürde:k
 love-RECP-PRS-1PL self-self-POSS.1PLACC very
 [AGENT]
kili:l-i-bit.
 esteem-PRS-1PL
 '[How long will we hide], we love each other for a long time, we esteem each other a lot.'
 (NaLE_2002_StonyBone_flk.018)

Passive constructions are relatively rare in Dolgan. Formally, passive verbs share many properties with unaccusative verbs since their subject also plays a

patient-like semantic role, cf. example (536). The first clause contains the unaccusative verb *hüt-* ‘get lost’, and the second the passive verb *bululun-* ‘be found’. Seemingly, both clauses are structured identically. Therefore, passive constructions are valence decreasing operations in which the given verb has one single patient-like argument.

- (536) *Kihi hüt-er kihi bul-ull-al-lar.*
 human get.lost-PRS.3SG human find-PASS-PRS-3PL
 ‘People get lost, and people are found.’
 (AnSP_AnIM_2009_Girl_nar.AnSP.019)

According to Li (2011: 278–280), the agent of a passive verb can be realized overtly, exhibiting dative-locative or instrumental case marking. In the material analyzed here, there are only very few passive constructions, where an adverbial marked with the dative-locative case could possibly be interpreted as an agent. However, the Russian translations given by native speakers favour a local interpretation of the adverbial.

- (537) *Min o-lor-go it-illi-bit-im – [...].*
 1SG.PRO that-PL-DAT/LOC rise-PASS-PST2-1SG
 ‘I was brought up at theirs (~ by them), [an old man and an old woman].’
 (original translation: ‘Я у них воспитывалась—[дедушка с бабушкой].’)
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.035)

7.3.2.3 Speech Verbs as Applicatives

As described in Section 7.3.1.5, the speech verbs *dîe-* ‘say’, *hayar-* ‘speak; say’, *et-* ‘speak; say’ and *kepse-* ‘tell’ are principally ditransitive in Dolgan. Their second argument plays the theme role and is coded with the object cases (accusative, nominative, partitive). Their third argument plays the recipient/addressee role and is coded with the dative-locative case. The examples (538) to (541) show this structure for all four verbs.

- | | | | | |
|-------|--------------------|------------------|---------------------|-----------------------|
| | AGENT | | THEME | |
| (538) | <i>Dogot-tor-o</i> | <i>da</i> | <i>tūōg-u</i> | <i>da dîe-bet-ter</i> |
| | friend-PL-POSS.3SG | EMPH | what-ACC | INDF say-NEG.PRS-3PL |
| | | | RECIPIENT/ADDRESSEE | |
| | <i>e-bit</i> | <i>ginîe-ke.</i> | | |
| | AUX-PST2.3PL | 3SG.PRO-DAT/LOC | | |

'His friends didn't even say something to him.'
(PoNA_19900810_Tojo0InVoloChanka_nar.091)

- (539) AGENT THEME
Hübehit ka:s ös-tör-ü beje-tin
 leader goose news-PL-ACC self-POSS.3SG.GEN
 RECIPIENT/ADDRESSEE
d'on-u-gar hajar-bit-a.
 people-POSS.3SG-DAT/LOC speak-PST2-3SG
 'The leader goose told the news to its people.'
 (PoNA_2004_SnowOwl_flk.013)

- (540) RECIPIENT/ADDRESSEE [AGENT]
 [...] *hette timek ičči-ti-ger et-er*
 seven button master-POSS.3SG-DAT/LOC speak-PRS.3SG
 THEME
ild'it-i.
 message-ACC
 '[The boy goes and] tells the message to the master of seven buttons.'
 (BoND_1964_ThreeBrothers_flk.072)

- (541) RECIPIENT/ADDRESSEE THEME
Tat'jana Ivanovna-ga o-lor-u
 Tatyana Ivanovna-DAT/LOC that-PL-ACC
 [AGENT]
kepse:-bit-im.
 tell-PST2-1SG
 'I told Tatyana Ivanovna those [things].'
 (PoIP_ErAI_2009_Life2_nar.PoIP.027)

However, Dolgan speech verbs exhibit a peculiarity, which possibly relates to the notion of *applicative*. Applicatives promote non-argument participants to an argument position, mainly the object position (Payne 1997: 186–187). When Dolgan speech verbs occur together with direct speech, their recipient/addressee argument can be realized as their second argument, exhibiting the morphosyntactic properties of a direct object. The examples (542) to (545) demonstrate this for the four aforementioned speech verbs. The emerging pattern is relatively frequent, though not obligatory, with the verb *dîe*- 'say', and more seldom with the verbs *hajar*- 'speak; say', *et*- 'speak; say' and *kepse*- 'tell'.

- (542) “THEME” [AGENT] RECIPIENT/ADDRESSEE
“Ūören-ime”, d-i:l-ler mijigi-n.
 learn-NEG.IMP.2SG say-PRS-3PL 1SG.PRO-ACC
 ‘“Don’t learn”, they say to me.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.059)
- (543) AGENT RECIPIENT/ADDRESSEE
Birde ki:h-a Bulčut-un, ūol-un
 one girl-POSS.3SG Hunter-POSS.3SG.ACC boy-POSS.3SG.ACC
 “THEME”
hajar-ar: [...]
 speak-PRS.3SG
 ‘Once the girl said to Hunter, to the boy: [“How long will we hide from our parents?”].’
 (NaLE_2002_StonyBone_flk.009)
- (544) AGENT RECIPIENT/ADDRESSEE
Staršina ūol-a dogor-un
 local.chief son-POSS.3SG friend-POSS.3SG.ACC
 “THEME”
et-er: [...]
 speak-PRS.3SG
 ‘The local chief’s son says to his friend: [“Well, isn’t it a girl?!”].’
 (BeVP_1970_BaldheadedOrphanBoy_flk.033–034)
- (545) “THEME” RECIPIENT/ADDRESSEE
“D’e it-iala-h-al-lar”, kamand’ir-bitin
 well shoot-ITER-COOP-PRS-3PL commander-POSS.1PL.ACC
 [AGENT]
keps-ir.
 tell-PRS.3SG
 ‘“They are shooting”, our commander is told.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.025)

This construction occurs apparently because the theme argument is realized as direct speech, seemingly standing outside the clause structure. Hence, this structure is not a valence increasing operation, but the verb's valence remains the same or is even reduced, depending on the syntactic status of the direct speech. Since direct speech can, at least intonationally, be integrated into the clause structure (like in the examples (542) and (545)), I would cautiously ana-

lyze it still as an argument of the verb. Then the verb is still trivalent, exhibiting one subject argument (agent) and two object arguments (theme, recipient). Finally, the promotion of the recipient argument is not obligatory if the theme argument corresponds to direct speech. It is still possible then to code the recipient/addressee with the dative-locative case, thus, as usually in ditransitive clauses, like in example (546).

- (546) AGENT RECIPIENT/ADDRESSEE
Kuŋad'aj balti-ti-gar et-er:
 Kuŋad'aj younger.sibling-POSS.3SG-DAT/LOC say-PRS.3SG
 "THEME"
"Taba-gin kölüj".
 reindeer-POSS.2SG.ACC harness.IMP.2SG
 'Kungadjaj says to his younger brother: "Harness your reindeer".'
 (BoND_1964_ThreeBrothers_flk.037)

7.4 Adpositional Phrase

Adpositional phrases have an adposition as their head, which is always a postposition in Dolgan. Consequently, adpositional phrases are strictly head-final in Dolgan. Adpositional phrases take a noun phrase as their complement, whereby the postposition governs the case of the depending noun, which can be as follows: nominative, genitive, accusative, dative-locative, ablative. See also Section 3.7 for a list of postpositions and their government patterns. Some postpositions can also take a clause as their complement, forming adverbial clauses, which is discussed in detail in Section 9.3.3. This pattern applies to the postpositions *dîeri* 'until', *kenne* ~ *genne* 'after', *gitta* ~ *kitta* 'with', *hagina* 'during', *ihin* 'because of; for', *kördük* ~ *kurdük* 'like' and *tali* 'similar to'. The examples (547) and (548) display adpositional phrases with the postposition *ihin* 'because of; for' as the head. In example (547), the complement is a noun; in example (548), it is an adverbial clause expressing causality.

- (547) *Bu bari-ta aga-m ihin, [...].*
 this all-POSS.3SG father-POSS.1SG because.of
 'That's all because of my father, [if I had a husband, would I get tired scooping water?!].'
 (BeVP_1970_Laajku_flk.052)

- (548) [...] *on-tu-lara* *tuksu-batag-in*
 that-POSS.3SG-POSS.3PL **work-NEG.PTCP.PST-POSS.3SG.GEN**
ihin kim-ne:-bit-ter, oŋor-but-tar itinne kalxo:z.
because.of who.PH-VBZ-PST2-3PL make-PST2-3PL there kolkhoz
 ‘[Then, after a year had passed], they turned it [= the sovkhoz] into a
 kolkhoz because it didn’t work.’
 (BeES_1997_HistoryOfKatyryk_nar.005)

7.5 Adverb Phrase

Adverb phrases have an adverb as head of the phrase and, as a rule, no complement, which their head would govern. Thus, many adverb phrases are formed by a bare adverb, which is the language-indicating adverb *hakali:* ‘in Dolgan’ in example (549).

- (549) [...] *haka-li:* *Iste diē-čči-ler.*
Dolgan-SIM Iste say-HAB-3PL
 ‘[My name is Iste (Stepanida)], in Dolgan they say Iste.’
 (BeSN_2009_Family_nar.001)

Like adjectives, also adverbs can be modified by the degree adverbs *bagaji* ~ *bagaj* (550) and *mija:* ~ *min’a:* ~ *muja* ~ *mun’a* (551), which stand after the adverb they modify. The former adverb occurs in both Upper and Lower Dolgan varieties, whereas the latter only occurs in Upper Dolgan.

- (550) *On-tu-ŋ* *ma:ma-m* *erde bagaji*
 that-POSS.3SG-POSS.2SG mum-POSS.1SG **early very**
öl-büt-e, [...].
 die-PST2-3SG
 ‘Then my mother died very early, [and I stayed with my father].’
 (BeSN_2009_Family_nar.004)
- (551) [...] *ol dūo minigi-n* *erde mija: er-ge*
 that MOD 1SG.PRO-ACC **early very** husband-DAT/LOC
bīer-bit-tere būolla ebe-m-e:k.
 give-PST2-3PL EMPH grandmother-POSS.1SG-PROPR
 ‘[We being women, we being women], my grandparents married me
 off very early.’
 (BeAM_199X_LegendSpiritOfTrees_nar.246)

If the head adverb is formed with the derivational suffix -Tik, the latter is added to the modifying adverb, not to the head adverb. This pattern can unambiguously be shown for the adverb *bagaji* ~ *bagaj* (552). In the case of the adverb *mija*: ~ *min'a*: ~ *muja* ~ *mun'a*, the pattern is expected, too, but cannot be proven since no relevant instances could be found in the analyzed material. However, given that case endings may be attached, if the adverb modifies an adjective, and the adjective is not in attribute position (see Section 7.2), it stands to reason that this holds for -Tik as well.

- (552) *Onton üčügej bagaji-tik olor-bup-put*, [...].
 then good very-ADVZ live-PST2-1PL
 'Then we were living very well, [my husband ceased drinking alcohol, with the child].'
 (UoPP_ChGS_20170724_SocCogRetell2_nar.UoPP.029)

Clausal Syntax—Simple Clauses

Simple clauses are understood here as clauses containing one predicate and one predication, respectively. The predicate can be a verbal or a non-verbal item. Verbal predications have, thus, a verb as predicate and, depending on the verb's argument structure, several arguments of the verb. In Section 8.1, verbal predications are discussed. Moreover, the core syntactic functions subject, direct object and indirect object are dealt with there. In Section 8.2, non-verbal predications are discussed, focusing on the types of non-verbal predicates. In Section 8.3, the status and the syntax of (free) adverbials are addressed. They are dealt with separately since their appearance is mostly not pre-defined by the verb's argument structure in verbal predications. Additionally, they are likewise relevant in non-verbal predication. Whereas these sections deal with declarative clauses, Section 8.4 deals with non-declarative clauses, namely imperative clauses in Section 8.4.1 and interrogative clauses in Section 8.4.2. Section 8.5, finally, describes the central negation patterns in simple clauses.

8.1 Verbal Predication

Verbal predication means that a verb forms the predicate of a clause. Depending on the verb's argument structure, there is a varying amount of obligatory noun phrases in the clause, called arguments. Moreover, the clause may have further constituents that do not depend on the verb, called adjuncts. The following sections are organized according to the number of arguments of the verb in the respective clause. Section 8.1.1 deals with impersonal clauses, where the verb lacks any argument. Section 8.1.2 deals with intransitive clauses, where the verb has one argument. Section 8.1.3 deals with (mono)transitive clauses, where the verb has two arguments. Section 8.1.4 deals with ditransitive clauses, where the verb has three arguments. Following this structure, several syntactic functions and their patterns are dealt with in different sections: The subject is discussed in Section 8.1.2, the direct object is discussed in Section 8.1.3, and the indirect object is discussed in Section 8.1.4.

8.1.1 *Impersonal Clauses*

Impersonal clauses are broadly understood as clauses that cluster around a verb with no referential subject (Malchukov & Ogawa 2011: 20). It is import-

ant to note that there may thus be a syntactic subject in the clause, but it must not have a concrete referent. Impersonal clauses in Dolgan are observed in three functional domains: atmospheric/meteorological verbs, necessitative constructions, and impersonal constructions with indefinite and non-specific subjects.

Atmospheric/meteorological verbs are mostly denominal derivations. They exhibit third-person singular verb morphology and often lack a formal subject, like the examples (553) and (554). However, sometimes a dummy subject is also used, like in example (555).

- (553) *Kihin ham̃:r-da-bit, ka:r-a bari-ta bus*
 winter rain-VBZ-PST2.3SG snow-POSS.3SG all-POSS.3SG ice
būōl-but.
 become-PST2.3SG
 'In winter, it rained, [and] the whole snow turned to ice.'
 (ErSV_1964_WarPartridgesPikes_flk.003)
- (554) *Čubu karañar-īa.*
 soon get.dark-FUT.3SG
 'Soon, it will turn dark.'
 (AsKS_19XX_Amulet_nar.142)
- (555) *Töhö da būōl-bakka kalla:n karañar-bit.*
 how.much INDF be-NEG.CVB.SIM sky get.dark-PST2.3SG
 'Soon, it turned dark.'
 (ChPK_1970_ThreeBoys_flk.063)

Additionally, lexical verbs like *tūs*- 'fall' (556) and *ogus*- 'beat' (557) can express atmospheric events in Dolgan. In this case, the original meaning of the verb is bleached, and the latter carries only person-number as well as eventually TAME morphology. Given this, the emerging pattern can be labelled "dummy (auxiliary) verb" following Malchukov & Ogawa (2011: 26). The atmospheric event itself, in turn, is expressed by the subject as the first argument of the verb. Consequently, the given construction is no impersonal clause from a purely structural point of view since there is a subject in the clause, which conveys essential semantics to the clause's proposition. However, the construction is formally constrained to the third person singular and functionally constrained to atmospheric events. Thus, it is analyzed here by analogy to the impersonal constructions discussed above, although it differs to some extent.

- (556) *Ulaka:ta* *testi-bit-e* *du:, hamir tüs-püt* *du:,*
 chum.edge-POSS.3SG drip-PST2-3SG Q rain fall-PST2.3SG Q
tûok du:?
 what Q
 'Did the edge of the chum drip, did it rain, or what?'
 (UkET_19940424_OldWomanTaal_flk.004)
- (557) *Tial-la:k* *purga* *ogus-t-a.*
 wind-PROPR snowstorm beat-PST1-3SG
 'A windy snowstorm came up.'
 (AkEE_19XX_BoySister_flk.104)

The second group of impersonal clauses contains forms of the necessitative mood 2 (see Section 6.5.7.2). The predicate of the clause is formed by the necessitative particle *na:da* 'need to; necessary' (< Russian *nado* 'id.'), governing the future participle of the relevant verb. If the logical subject is indefinite and non-specific, the participle carries the dative-locative case suffix, and there is no expression in the clause referring to the logical subject (558). If the logical subject has a concrete referent like in (559), the future participle exhibits the needed possessive suffix and the accusative case suffix, forming a subordinate complement clause (see Section 9.3.1). Syntactically, the logical subject is expressed as the possessor of the participle in the subordinate clause. Therefore, either construction lacks a syntactic subject and must be analyzed as an impersonal clause.

- (558) *Bu tebielen-e* *hit-ar-i*
 this fidget.with.legs-CVB.SIM lie-PTCP.PRS-ACC
ergiçi-t-iêk-ke *na:da.*
 turn-CAUS-PTCP.FUT-DAT/LOC need.to
 'Such [a calf], which lies and fidgets with its legs, has to be turned.'
 (KiMN_1975_ReindeerHerding_nar.014)
- (559) *Be:be, maynaj-bitin* *bul-uök-putun* *na:da.*
 wait first-POSS.1PL.ACC find-PTCP.FUT-POSS.1PL.ACC need.to
 'Wait, we have to find the beginning.'
 (ChGS_UoPP_20170724_SocCogOrder_conv.ChGS.023)

The last type of impersonal clauses is formed by any verb with an indefinite and non-specific subject, which per default appears in the second person singular or third person plural. This construction is functionally equivalent to agent-

less passives or dummy-subject constructions in Indo-European languages (e.g. English *one*, German *man*, French *on*). It is used to make general statements, like in examples (560) and (561), and expresses events whose agent is unknown or not important, like in example (562).

- (560) *A čugas kös-kö* *ikki taba-ni*
 and close reindeer.caravan-DAT/LOC two reindeer-ACC
kölüj-el-ler.
harness-PRS-3PL
 ‘And for a close migration, one harnesses two reindeer.’
 (AnIM_2009_Argish_nar.032)
- (561) *Irîa-ni da umn-a-gîn,* *oloŋko-nu da umn-a-gîn.*
 song-ACC and **forget-PRS-2SG** tale-ACC and **forget-PRS-2SG**
 ‘One forgets the songs, [and] one forgets the tales.’
 (UkET_AkEE_19940424_SongsTales_conv.UkET.107)
- (562) *Kaja, kihi-ler-i* *Maskva-ga* *ill-el-ler*
 well human-PL-ACC Moscow-DAT/LOC **take.away-PRS-3PL**
ühü.
 they.say
 ‘Well, people are brought to Moscow, they say.’
 (BeES_1997_HistoryOfKatyryk_nar.118)

8.1.2 Intransitive Clauses

Intransitive clauses cluster around an intransitive verb, which has exactly one argument. As was described in Section 7.3.1, intransitive verbs can be split into unaccusative and unergative verbs. In finite intransitive clauses, however, both types of verbs behave similarly, whence they are discussed here together. The single argument of an intransitive verb, which can be a noun or a pronoun, forms the subject of the respective clause. Nouns are always third-person subjects since they, by default, refer to some entity apart from speaker and hearer. Pronouns can occur in all persons.

- (563) *N'ūḍuhut-um* *öl-l-ö.*
front.reindeer-POSS.1SG die-PST1-3SG
 ‘My front reindeer has died.’
 (BeAM_199X_HumanInLandOfDeath_flk.113)

- (564) *Gini toze ülel-ir e-t-e.*
3SG.PRO also work-PTCP.PRS AUX-PST1-3SG
 ‘He was also working.’
 (SuON_KuNS_19990303_HardLife_conv.SuON.243)

- (565) *Min emîe bar-a-bin.*
1SG.PRO also go-PRS-1SG
 ‘I also go.’
 (ErSV_1964_SnowOwl_flk.025)

Moreover, complement clauses can replace the subject of a clause, as addressed in detail in Section 9.3.1. However, this pattern is rare, and proper instances like example (566) are difficult to find.

- (566) *Kim tuspa d’uka: tup-pat-tar, d’îe-ge*
who individually tent build-NEG.PRS-3PL house-DAT/LOC
törö-t-ö:ččü-ler, [...].
give.birth-CAUS-HAB-3PL
 ‘Who does not build up a tent especially, lets her give birth at home,
 [in the living tent].’
 (SuAA_20XX_Birth_nar.025)

The examples show that the subject agrees almost without exception in person and number with the verb. This is also true in the case of overt third-person plural subjects, which is surprising from a turcological point of view since most Turkic languages allow for disagreement in these contexts (Johanson 2021: 561). (567) and (568) show agreeing third-person plural objects.

- (567) *Onton mu:ŋka-hit-tar-ij munka-l-i:l-lar.*
then seine-AGN-PL-POSS.2SG seine-VBZ-PRS-3PL
 ‘Then the fishermen fish with a seine.’
 (BeES_1997_HistoryOfKatyryk_nar.122)

- (568) *O-lor kepse:bit-ter ere: [...].*
that-PL tell-PST2-3PL just
 ‘They just told [him]: [...].’
 (BaRD_1930_MasterOfWorld_flk.014)

In the case of coordinated subjects (see Section 7.1.4 for the coordination of noun phrases), the predicate has mostly plural morphology, regardless of the pattern of coordination.

- (569) *Bilir ogonn'or-do:k eme:ksin olor-but-tar.*
 long.ago old.man-PROPR old.woman live-PST2-3PL
 'Long ago, there lived an old man and an old woman.'
 (YaP_1930_GroomFromUpperWorld_flk.001)
- (570) *Tonyus in'e-tin kitta bar-an ka:l-bit-tar.*
 Ewenki mother-POSS.3SG.ACC with go-CVB.SEQ stay-AUX-PST2-3PL
 'The Ewenki and his mother went off.'
 (ChPK_1970_Nganasan_flk.036)

The subject of an intransitive clause can be realized overtly, like in the examples above. Still, it can also be omitted from the clause since verbal morphology always codes it unambiguously. This is true in all other finite clause types, too. The following numbers take into account subjects of all clause types, not only subjects of intransitive clauses. The results are, thus, transferable to transitive and ditransitive clauses as well. In the analyzed corpus data, ca. 55 % (3,093 out of 5,585) of subjects are realized covertly. In the following clauses, only the personal endings at the verb express the person and number of the subject.

- (571) *Ogo-lor-gun gitta olor-un-a-gin.*
 child-PL-POSS.2SG.ACC with live-MID-PRS-2SG
 'You live together with your children.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.063)
- (572) *Urukku-lu: ill-i:l-lar.*
 former-SIM sing-PRS-3PL
 'They sing like they used to.'
 (ElBK_KuNS_2004_Storytellers_conv.KuNS.021)

The conditions for omitting subjects in Dolgan are largely unexplored. As for first- and second-person subjects, the covert realization of the subject seems to be the standard pattern since ca. 80 % (1,091 out of 1,353) of first- and second-person subjects are omitted. As for third-person subjects, this is more complicated. Just under 50 % (2,002 out of 4,232) of third-person subjects are omitted from the clause. Here, reference tracking undoubtedly plays a role since it depends on the aforementionedness of a third-person referent, whether it has to be realized overtly or not. In Section 10.3, reference tracking will be discussed in detail, taking into account omitted subjects, too.

As for its semantics, the subject of an intransitive clause can play several semantic roles. Indeed, the semantic role of an agent is most frequent (see

Dik 1978 for a hierarchy of semantic roles). Still, subjects are also patients (with unaccusative verbs like *tüis-* ‘fall’ or *öl-* ‘die’), themes (e.g. with posture verbs like *tur-* ‘stand’ or *olor-* ‘sit’) and experiencers (e.g. with perceptive verbs like *kör-* ‘see’ or *ihit-* ‘hear’). In passive clauses—though passivization is not very frequent in Dolgan—the subject is a patient or a theme most frequently.

- (573) *A d'ie-ler ke tut-ullu-but e-ti-ler?*
 and **house-PL** PTCL build-PASS-PTCP.PST AUX-PST1-3PL
 ‘And the houses were built?’
 (SuON_KuNS_19990303_HardLife_conv.KuNS.035)

Apart from the subject and the predicate, there may be various adverbials in an intransitive clause, whose functions and syntax are discussed in Section 8.3. Moreover, there can be particles, interjections or alike. Since Dolgan is a verb-final language, the subject usually precedes the verb in intransitive clauses. Adverbials are most often placed either before the subject (sentence adverbials) or between the subject and the verb (sentence as well as VP-modifying adverbials). The word order and its relation to information structure are discussed in Sections 10.1 and 10.2.

8.1.3 *Transitive Clauses*

Transitive clauses cluster around a verb that has exactly two arguments. The first argument is the subject, and the second is prototypically the direct object. As discussed in Section 7.3.1, it is debatable whether verbs with adverbials as obligatory second argument count as transitive verbs. Here, only verbs with direct objects as the second argument are called transitive so that transitive clauses contain a verb as the predicate, a subject and a direct object.

As Dolgan is a nominative-accusative language, subjects of transitive clauses behave like subjects of intransitive clauses. Therefore, the assumptions made in Section 8.1.2 are also applicable to transitive clauses. In Section 4.2.2, it was already stated that Dolgan exhibits *Differential Object Marking* (DOM) (see Bosson 1985). Direct objects can be marked with the nominative, accusative and partitive cases.

The exact patterns of direct object marking in Dolgan are not fully understood yet, but some clear tendencies can be observed. From a quantitative point of view, the accusative case is by far the most frequent strategy for marking direct objects, making up ca. 81% (1,053 out of 1,292) of all direct objects in the analyzed material. Ca. 17% (216 out of 1,292) of all direct objects are unmarked, and only ca. 2% (23 out of 1,292) show partitive case marking. To understand

the patterns of direct object marking in Dolgan, it makes sense to discuss the less often used strategies first.

Unmarked direct objects are almost without exception indefinite and non-specific or generic.

- (574) [...] *ol tiri-ti-nen düñür oñost-ol-lor.*
 that skin-POSS.3SG-INS shaman.drum make-PRS-3PL
 ‘[There they skin an old woman] and make a shaman’s drum out of her skin.’
 (BaRD_1930_DaughterOfNganasan_flk.069)

- (575) *Karči oñost-ol-lor.*
 money make-PRS-3PL
 ‘They are making money.’
 (ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.078)

Two morphological features underline this assumption: Unmarked direct objects rarely occur with possessive suffixes, neither do they exhibit plural marking. If possessive suffixes occur at unmarked direct objects, no concrete possessive relation—which would indicate definiteness—is available, but rather quasi-composition, e.g. *ogo atag-a* ‘child shoe-POSS.3SG’ = ‘child’s shoes’. This feature is insofar diagnostic, as possessed entities can be analyzed as per default definite (Taylor 1995: 201). The absence of plural marking is thought-provoking when viewed together with forms underspecified for number (see Section 4.1.1). These forms occur in Dolgan when the number of a referent is either not important or unknown in the given context. Since this is primarily true in the case of indefinites, non-specifics and generics, the parallel of underspecified number forms and unmarked direct objects can easily be understood. In example (576), the speaker talks about reindeer herding in general and, thus, does not refer to a concrete group of reindeer being caught. Therefore, the plural need not be coded explicitly, and the direct object is unmarked.

- (576) *Onno taba tutt-al-lar.*
 then reindeer catch-PRS-3PL
 ‘Then one catches the reindeer.’
 (AnIM_2009_Argish_nar.009)

From a syntactic point of view, unmarked direct objects tend to occur preferably immediately preverbally or less frequently immediately after the verb.

- (577) *Haŋa karabi:n ilim-mit-a, burduk, taba:k, ča:j, ma:sla,*
 new carbine buy-PST2-3SG flour tobacco tea butter
sa:xar.
 sugar
 'He bought a new carbine, flour, tobacco, tea, butter, sugar.'
 (AsKS_19xx_Amulet_nar.216)

Artem'ev (1999a: 70) states that the nominative case is used with direct objects, which are conceived as forming a unity together with the verb. This correlation is precisely the result of the morphological and syntactic by-effects of unmarked direct objects described above. If the object of an action is indefinite, non-specific or even generic, the speaker likely tells something about the event itself rather than about an individualized referent. To put it differently: The less individualized a referent is, the more likely it is unmarked when occurring as a direct object in the clause.

Partitive case marking is the least frequent strategy of marking direct objects in Dolgan. Direct objects marked with the partitive case are indefinite and non-specific. However, the indefiniteness and unspecificity of a direct object are necessary but not sufficient for partitive case marking since indefinite and non-specific objects can also be unmarked. The usage of the partitive case in Dolgan seems to be tightly interwoven with certain morphosyntactic domains, namely the future tense (578), the imperative mood (579) and the necessitative moods (580).

- (578) *L'uboj irîa-ta ill-îa-m, be:be.*
 random song-PART sing-FUT-1SG wait
 'I'll sing a random song, wait.'
 (UkET_AkEE_19940424_SongsTales_conv.UkET.050)
- (579) *Oŋor-uŋ kömüs ilim-ne, kömüs tî-ta, kömüs*
 make-IMP.2PL gold net-PART, gold small.boat-PART gold
erdi-te.
 oar-PART
 'Make a golden net, a golden small boat and golden oars.'
 (ChPK_1970_ThreeBoys_flk.020)
- (580) *He:, bu taba:k-ta birag-îak-kin na:da.*
 AFF this tobacco-PART throw-PTCP.FUT-POSS.2SG.ACC need.to
 'Yes, one has to throw tobacco [onto the grave].'
 (KiPP_2009_Belief_nar.KiPP.102)

These constructions have in common that the relevant event has not happened yet, which appears to be a decisive criterion for marking direct objects with the partitive case. Consequently, the given referent most often does not yet exist at the moment of speech. Artem'ev's (1999b: 111) claim of the benefactive meaning of direct objects marked with partitive case and possessive suffixes, in turn, cannot be supported based on the material analyzed here, which is described in more detail in Section 4.2.2.4.

Finally, the accusative case is the most frequent form to mark direct objects. The discussion above implies that direct objects marked with the accusative case are prototypically definite or at least specific. In example (581), the referents are aforementioned; moreover, their definiteness is indicated by appearing in a possessive relationship. In example (582), the referent is neither aforementioned nor definite for another reason. Nonetheless, it is individualizable since the speaker talks about a particular man, which is characterized further in the following context. Therefore, the referent is indefinite but specific.

- (581) *Ogo-tun* *öjd-ür,* *d'aktar-in*
 child-POSS.3SG.ACC remember-PRS.3SG woman-POSS.3SG.ACC
öjd-ür.
 remember-PRS.3SG
 'He remembers his child, [and] he remembers his wife.'
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.161)

- (582) *Onno bür kibi-ni* *bul-lu-but.*
 there one human-ACC find-PST1-1PL
 'There, we found one man.'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.059)

Semantically, direct objects mostly correspond to referents playing the semantic roles *theme* or *patient* like in the examples above. Rarely, also recipients can be marked with the accusative case, especially as arguments of speech verbs. Here, only one example is given—in Sections 7.3.2.3 and 8.1.4, this phenomenon is discussed in detail together with ditransitive predicates.

- (583) *"D'e it-îala-h-al-lar",* *kamand'ir-bitin*
 well shoot-ITER-COOP-PRS-3PL commander-POSS.1PL.ACC
keps-ür.
 tell-PRS.3SG
 '“They are shooting”, [someone] tells our commander.'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.025)

In contrast to subjects, direct objects are always expressed overtly in Dolgan. Omitting them is not grammatical. However, there are instances where a possible object can be derived from the context, but those constructions are analyzed here as elliptic. Since the referent has already been mentioned in the question in example (584), it is unnecessary to repeat it in the answer. However, this is due to pragmatics, wherefore it can be assumed that the direct object is neither present syntactically in the second clause.

- (584) a. *Onton ke Dima ölor-t-ö düw kıl-i?*
 then PTCL Dima kill-PST2-3SG Q **wild.reindeer-ACC**
 ‘Then did Dima kill a reindeer?’
 (AnIM_AnMSp_2009_Holiday_conv.AnIM.012)
- b. *Hüök ölor-ö ilik.*
 no kill-CVB.SIM not.yet
 ‘No, he did not kill [it/any] yet.’
 (AnIM_AnMSp_2009_Holiday_conv.AnMSp.020)

Apart from the subject, the direct object and the verbal predicate, there may be various adjuncts (mostly adverbials) in a transitive clause in Dolgan. These are discussed in Section 8.3. The word order in transitive clauses generally adheres to the head-final structure of Dolgan. So the verb is positioned clause-finally, and the subject precedes the direct object. However, word order is quite flexible, and information structural processes (mostly topicalization and post-verbal backgrounding) cause many deviations from this standard pattern (see Section 10.1 and 10.2 for a detailed discussion).

8.1.4 Ditransitive Clauses

Ditransitive clauses cluster around a verb, which has three obligatory arguments. Traditionally, these arguments are defined syntactically being the subject, the direct object and the indirect object of the clause. In recent typological work, however, Malchukov et al. (2010: 1) point out that a semantic definition holds better: In their view, a ditransitive clause is organized around a verb, which has an agent argument, a recipient-like argument, and a theme argument. As will be seen in what follows, both definitions can be applied to Dolgan.

Prototypical ditransitive clauses contain a verbal predicate that describes some kind of transfer, the most relevant verb being *bîer-* ‘give’. The subject (agent) and the direct object (theme) are coded exactly like in transitive clauses. The indirect object (recipient) exhibits dative-locative case marking.

According to Malchukov et al.'s (2010: 3–4) typology, Dolgan, thus, shows indirective object alignment in ditransitive clauses.

- (585) *Bihigi ejîe-ke büütün tugut-ta biêr-e-bit.*
 1PL.PRO 2SG.PRO-DAT/LOC whole reindeer.calf-PART give-PRS-1PL
 'We will give you a whole reindeer calf.'
 (PoS_PrG_1964_Kaamyylaak_flk.018)

One single clause in the corpus seems to exhibit secundative alignment in Malchukov et al.'s (2010: 3–4) typology. In this instance, shown in example (586), the recipient is coded as the direct object, and the theme is coded as an adverbial.

- (586) *D'e on-u ba: kilîeb-i-nen birak-pit.*
 well that-ACC this bread-EP-INS throw-PST2.3SG
 'Well, she threw some bread to him.'
 (BaA_1930_OldManOldWoman_flk.058)

This pattern, however, is an exception in Dolgan. Nevertheless, it shows why Malchukov et al. (2010) favour a semantic definition of ditransitive clauses: From a strict syntactic point of view, this clause is not ditransitive since there is no indirect object in the proper sense.

The examples above code instances of physical transfer, i.e. a concrete object is transferred from one referent to another. Besides that, ditransitive clauses also express mental transfer. This applies to speech verbs like *dîe*- 'say', *haŋar*- 'speak; say', *et*- 'speak; say' and *kepse*- 'tell'. Generally, ditransitive clauses expressing mental transfer do not differ from those expressing physical transfer. The addressee of speech is here the recipient-like argument and, thus, marked with the dative-locative case.

- (587) *Debge:n eme:ksin Ogdûo ogo-tu-gar ös*
 Yevgeniya old.woman Ogdûo child-POSS.3SG-DAT/LOC story
keps-i:r e-bit, [...].
 tell-PTCP.PRS AUX-PST2.3SG
 'The old woman Yevgeniya tells a story to her child Ogdûo, [who walks beneath her and helps without a break].'
 (PoNA_19910207_Fishing_nar.013)

However, the expression of physical and mental transfer differs in one detail in Dolgan. In the case of mental transfer, the theme is often expressed by dir-

ect speech. If so, the addressee can optionally be marked with the accusative case instead of the dative-locative case, like in examples (588) and (589). It seems that the addressee is promoted in both argument structure and syntactic realization, yielding this alignment pattern. Consequently, these clauses are no longer ditransitive since the verb has only two arguments: the agent (realized as subject) and the addressee (realized as direct object).

- (588) *D'e it-îāla-h-al-lar,* *kamand'ir-bitin*
 well shoot-ITER-COOP-PRS-3PL commander-POSS.1PL.ACC
keps-ir.
 tell-PRS.3SG
 ‘‘They are shooting’’, [someone] tells our commander.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.025)

- (589) *‘‘Üören-ime’’, d-i:l-ler mijigi-n.*
 learn-NEG.IMP.2SG say-PRS-3PL 1SG.PRO-ACC
 ‘‘Don’t learn [= study]’’, they say to me.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.059)

Benefactive constructions do not differ syntactically from other ditransitive structures in Dolgan. As example (590) shows, beneficiaries are coded like recipients in Dolgan. From a theoretical perspective, it is nonetheless debatable whether they are to be subsumed under the latter or not (Malchukov et al. 2010: 2).

- (590) *Plat’je tig-e-bit ogo-lor-butu-gar,* *hîālîja*
 dress sew-PRS-1PL child-PL-POSS.1PL-DAT/LOC trousers
tig-e-bit.
 sew-PRS-1PL
 ‘We sew dresses for our children, [and] we sew trousers.’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.089)

Hence, benefactive constructions appear to function like ditransitive clauses. However, there is one crucial difference. In proper ditransitive clauses, neither the direct nor the indirect object can be omitted. As soon as there is no direct object in the clause (like in (588) and (589)), the indirect object is promoted to a direct object, and the clause is not ditransitive anymore. In benefactive constructions, in turn, omitting the direct object is entirely possible and even frequent with the verb *kömölös*- ‘help’.

- (591) *Min en'îe-ke kömölöh-ûö-m, [...]!*
 1SG.PRO 2SG.PRO-DAT/LOC help-FUT-1SG
 'I will help you, [I will make a storeroom out of hay].'
 (ErSV_1964_WarBirdsAnimals_flk.027)

Thus, benefactive constructions may be ditransitive clauses (like in the former example) but are not necessarily (like in the latter example). The discussion of benefactive constructions also implies that indirect objects in ditransitive clauses—like direct objects in (di)transitive clauses, but unlike subjects—cannot be realized covertly.

As for word order in ditransitive clauses, it can be stated that it mainly depends on information structural phenomena, which are discussed in Sections 10.1 and 10.2. In an “ideal” and pragmatically “neutral” ditransitive clause, the subject occupies the clause-initial position, whereas the verb takes the clause-final position. The direct and the indirect object are placed between the subject and the verb. The order of the direct and the indirect object varies, depending on information structural criteria and the referential status of the objects. In example (592), the direct object is indefinite, whereas the indirect object is definite and aforementioned; moreover, the direct object belongs to the focus domain of the clause, and the indirect object does not. In example (593), in turn, both objects are aforementioned and, thus, definite; here, the information structural configuration triggers the observed structure since the indirect object belongs to the focus domain, whereas the direct object is backgrounded. As a tendency, it can, thus, be said that definite, aforementioned and backgrounded objects precede indefinite, newly introduced and focused objects in ditransitive clauses.

- (592) *Min en'îe-ke as-ta biêr-im.*
 1SG.PRO 2SG.PRO-DAT/LOC food-PART give-IMP.1SG
 'I shall give you food.'
 (MiAI_1964_OldPeasantOldWoman_flk.013)
- (593) *Öksökü ira:ktə:gi ki:h-in ûol-ga*
 Öksökü czar daughter-POSS.3SG.ACC boy-DAT/LOC
biêr-bit.
 give-PST2.3SG
 'The czar Öksökü gave his daughter to the boy.'
 (ErSV_1964_WarBirdsAnimals_flk.580)

Additionally, there is one formal constraint for the order of the direct and the indirect object. If the direct object is unmarked, it must not be separated from the verb. Consequently, it follows after the indirect object.

- (594) *Bu en'îe-ke kihil kômüs koruôpka biêr-e-bin.*
 this 2SG.PRO-DAT/LOC red silver box give-PRS-1SG
 'And I give you a golden box.'
 (ErSV_1964_WarBirdsAnimals_flk.591)

To sum up, it can be said that ditransitive clauses in Dolgan are mainly formed like transitive clauses with an additional recipient-like argument that is coded as an indirect object by dative-locative case marking. In clauses that express mental transfer, the indirect object can be promoted to the direct object if the second argument is realized as direct speech. Benefactive constructions often behave similarly, but in contrast to the prototypical ditransitives, a direct object is not obligatory in benefactive constructions.

8.2 Non-Verbal Predication

Non-verbal predication means that some non-verbal element, mostly nouns or adjectives, form (part of) the predicate. The subject of the clause and the non-verbal predicate can be linked in various ways, as described by Stassen (1997: Ch. 2&3) from a theoretical perspective. In Dolgan, the subject and the non-verbal predicate are linked by a copula verb, or the non-verbal predicate carries person-number morphology.

From a semantic perspective, every language has constructions that express proper inclusion, equation, attribution, location, existence, and possession (Payne 1997: 111). Forming a hierarchy, there is a decreasing tendency towards expressing these constructions through a non-verbal predication. Typologically spoken, proper inclusion is, thus, more likely to be expressed non-verbally, whereas (predicative) possession is relatively more likely to be expressed verbally. In Dolgan, all named semantic domains are expressed by non-verbal clauses. The concepts of proper inclusion and equation are expressed by predicate nominals (Section 8.2.1), whereas predicate adjectives (8.2.2) describe attribution. Locative and existential clauses, which are tightly interwoven, express the location of a given referent from different perspectives (Section 8.2.3). Finally, possessive clauses express predicative possession (Section 8.2.4).

8.2.1 *Predicate Nominals*

As was stated above, the concepts of proper inclusion and equation are expressed by predicate nominals in Dolgan. Following Payne (1997: 114), *proper inclusion* means that a given referent belongs to a particular class of referents, e.g. *I am a salesman*. In the case of *equation*, in turn, it is highlighted that two linguistic expressions refer to the same extra-linguistic entity, e.g. *He is my father*.

In Dolgan, both types of predicate nominals are realized identically. Only from the semantics and the context of the clause, it can be decided whether a proper inclusion or an equative reading is intended. In either case, the subject NP points to a referent. The nominal predicate specifies the class (595), where the subject referent belongs, or refers to the same entity with a different linguistic expression (596). In the present tense, indicative mood, the subject NP and the predicate NP are simply juxtaposed, whereby the predicate NP is inflected for person and number (see Section 4.4). The person-number endings used are the same as set 1 of verbal endings (so-called predicative endings; see Section 6.2).

- (595) *Gini bulčut.*
 3SG.PRO hunter.3SG
 'He is a hunter.'
 (AsKS_19XX_Amulet_nar.152)

- (596) *Min Laajku-bun et, ehigi o-nu bil-betek-kit!*
 1SG.PRO Laajku-1SG EVID 2PL.PRO that-ACC know-NEG.PST2-2PL
 'I am apparently Laajku, and you did not notice that!'
 (BeVP_1970_Laajku_flk.040)

In other tenses and moods than present tense indicative, both copula verbs *būōl-* and *e- ~ er-* (see Section 3.5.3) do occur. The copula *būōl-* can be used in all tenses and moods as displayed in (597) to (599).

- (597) *Baj kihi būōl-ūō-ŋ, [...].*
 rich person be-FUT-2SG
 'You will be a rich man, [I will marry you off to a rich woman].'
 (PoMA_1964_FoxDeceiver_flk.006)
- (598) *Urut taba ülehite būōl-but-a.*
 earlier reindeer worker-POSS.3SG be-PST2-3SG
 'Earlier, he was a reindeer worker.'
 (KiPP_NN2_2009_Family_nar.KiPP.055)

- (599) *Iti: da kün buōl-lun* [...].
 warm and day **be-IMP.3SG**
 ‘And let it be a warm day, [the water ferments, the skin also ferments, becomes soft].’
 (BeES_2010_HidePreparation_nar.019)

As was described in Section 3.5.3, *e-* and *er-* are variants of the same copula verb, whose occurrence is formally constrained. The former variant occurs in the affirmative past tenses of the indicative mood. Its postterminal evidential past tense forms, especially the third-person singular form *ebit*, at least additionally convey an evidential reading ((601); see Sections 6.4.2.3 and 6.6.2). In some contexts, the reference to the past is lost completely (602).

- (600) *Kalkūōz bihiē-ke, bihiqi ogo-lor e-ti-bit oččogo.*
 kolkhoz 1PL.PRO-DAT/LOC 1PL.PRO child-PL **be-PST1-1PL** then
 ‘The kolkhoz at our place, we were children then.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.095)

- (601) *Kör-büt-e, bert baskūōj bagaji kēs e-bit.*
 see-PST2-3SG very beautiful very girl **be-PST2.3SG**
 ‘He saw, [that] it was apparently a very beautiful girl.’
 (AkEE_19XX_BoySister_flk.121)

- (602) *O:, Li:bira ile uru-m e-bit du:?*
 oh Lyybyra real relative-POSS.1SG **be-PST2.3SG** MOD
 ‘Oh, Lyybyra is a real relative of mine, apparently.’
 (PoS_PrG_1964_Lyybyra_flk.075)

The conditional-temporal mood is especially noteworthy in the context of predicate nominals since the ambiguity of condition and simultaneity can be resolved by the choice of the copula verb. The copula verb *buōl-* can convey both a temporal (603) and a conditional (604) reading, whereas the copula verb *er-* always has a temporal reading (605).

- (603) *Kahan emete da d'aktar buōl-lak-kina öjdö:r*
 when INDF EMPH woman **be-TEMP-2SG** remember-FUT.IMP.2SG
iti-ni Oksīē.
 that-ACC Oksana
 ‘At some point, when you are a woman, remember this, Oksana.’
 (BeAM_199X_LegendSpiritOfTrees_nar.242)

- (604) *Iti: buōl-lag-ina bubaxt kīāj-īāk-pit huōg-a.*
 heat **be-COND-3SG** maybe can-FUT-1PL NEG-3SG
 ‘If [the weather] is hot, we maybe won’t make it.’
 (KiMN_1975_ReindeerHerdning_nar.108)

- (605) *Min ogo er-dek-pine kör-büt-üm.*
 1SG.PRO child **be-TEMP-1SG** see-PST2-1SG
 ‘I saw [it] when I was a child.’
 (PoNA_19910207_Fishing_nar.159)

8.2.2 Predicate Adjectives

Predicate adjectives express the semantic concept of attribution. Consequently, a predicate adjective attributes a property or a characteristic to the referent expressed by the subject NP (Payne 1997: 120). From a morphosyntactic point of view, predicate adjectives behave like predicate nominals in Dolgan (see Section 8.2.1).

- (606) *Oloŋko-go kūn kilgas.*
 tale-DAT/LOC day **short.3SG**
 ‘In tales, the day is short.’
 (ChPK_1970_ThreeBoys_flk.062)

- (607) *Savs’em kuččuguj-gun, [...]?*
 at.all **small-2SG**
 ‘You’re young, at all, [how old, you are around ten years old]?’
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.019)

- (608) [...], *ol kerget-ter-im bert üčügej e-ti-lere.*
 that parent-PL-POSS.1SG very **good be-PST1-3PL**
 ‘[My husband is a Kirgizov], my parents were very good.’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.039)

8.2.3 Locative and Existential Clauses

It is widely acknowledged that locative and existential clauses share many functional properties and are formed similarly, if not identically, in many languages of the world (see Milsark 1977, Freeze 1992, Creissels 2014). Both constructions predicate the existence or non-existence of an entity (henceforth: *theme*, a.k.a. *pivot*, *figure*) at a certain location (a.k.a. *coda*, *ground*). In locative clauses, the theme is prototypically definite and topical; thus, something is predicated about the theme. In example (609), the speaker talks about children, probably

their own, and tells that they are in school now. Existential clauses, in turn, prototypically contain an indefinite theme and often have the location as the topic of the clause. In example (610), the speaker talks about their children's school and tells that there are many new teachers now.

(609) *The kids are back in school for two weeks.*

(610) *In my kids' school, there are many new teachers.*

In Dolgan, locative and existential clauses share many structural features but also exhibit some fine-grained differences. In either clause type, the theme is realized as the unmarked subject of the clause, whereas the location is realized as a noun phrase with a local case suffix or an adpositional phrase. The existential noun *bar* 'there is' (and *hūōk* 'there is not', respectively; see Section 8.5.1.2) serves as a copula element to link theme and location. Example (611) displays a locative clause in Dolgan, and example (612) is an existential clause.

	THEME			LOCATION	
(611)	<i>Onton</i>	<i>ke</i>	<i>bīr</i>	<i>ogo-m</i>	<i>Kirēs-ka bar.</i>
	then	well	one	child-POSS.1SG	Kresty-DAT/LOC EX.3SG
	'Then one of my children is in Kresty.'				
	(KiPP_NN2_2009_Family_nar.KiPP.079)				

	LOCATION	THEME	
(612)	<i>Bu karma:ŋ-ŋa-r</i>	<i>mō:čük bar,</i>	<i>hüter-e:je-gin.</i>
	this pocket-POSS.2SG-DAT/LOC	ball	EX.3SG lose-ADM-2SG
	'There is a ball in your pocket, do not lose it.'		
	(ErSV_1964_WarBirdsAnimals_flk.483)		

As can be seen from the examples, only word order (and consequently information structure) distinguishes locative from existential clauses in Dolgan. According to Creissels' (2014) approach, Dolgan, thus, belongs to the group of languages that lack a designated existential construction.¹ However, this conclusion is worth discussing from both a turcological and typological perspective.

1 Creissels (2014) distinguishes languages, which have a designated existential construction (such as English *There is ...*), and languages, in which existential constructions are structurally locative constructions. Furthermore, he assumes that word order permutation of a locative construction does not yield a designated existential construction (Creissels 2014: 16–18).

ive. Although formal cognates of *bar*—and its negative counterpart *huōk*—are widespread in the Turkic language family, they are restricted to existential (and possessive) clauses in most languages, not occurring in locative clauses (see Karakoç 2019, Nevskaya & Amal 2020). Consequently, Dolgan appears to have taken over the patterns of existential predication to locative predication, which contradicts Creissels' (2014) assumption about the originality of locative predications and the secondariness of existential predications. Not going into further detail, the Dolgan and Turkic data may, thus, be valuable for typological perspectives on locative and existential predication as well.

In other persons than the third person singular, the personal endings from set 1 (see Section 6.2) are attached to the existential noun *bar*. As for the frequency of this pattern, third-person forms occur in both locative and existential clauses, whereas first- and second-person forms do not appear in existential clauses. This constraint is undoubtedly due to the referential status of first- and second-person referents since they per default point deictically to given entities in the discourse, namely the speaker and the hearer (Siewierska 2004: 7).² Example (613) displays an existential clause with a third-person plural theme, agreeing with the existential noun *bar*. Example (614) shows a locative clause with a third-person plural theme, agreeing with *bar*. In example (615), there is a first-person singular theme, whose location is predicated, again exhibiting agreement with *bar*.

- | | LOCATION | THEME | |
|-------|--|------------------------|------------------------|
| (613) | <i>Onno</i> | <i>emîe ki:l-lar</i> | <i>ba:l-lar</i> [...]. |
| | there | again wild.reindeer-PL | EX-3PL |
| | 'There are again wild reindeer, [we wounded one but did not find it].' | | |
| | (AnIM_AnMSp_2009_Holiday_conv.AnMSp.010) | | |

- | | LOCATION | [THEME] |
|-------|---|-------------------|
| (614) | <i>Hei, Ribnaj-ga</i> | <i>ba:l-lar</i> . |
| | AFF, Novorybnoe-DAT/LOC | EX-3PL |
| | 'Yes, they are in Novorybnoe.' | |
| | (KiPP_KuNS_200211_LifeManyChildren_conv.KiPP.016) | |

2 Whether or not this makes linguistic expressions of the first and second person inherently definite, cannot be discussed here. See, e.g. Lyons (1999: 26–32) and Bhat (2004: 47–52) for arguments of both points of view.

- (615) LOCATION [THEME]
“Ohok ann-i-gar bar:bin”, diē-bit.
 stove lower.part-POSS.3SG-DAT/LOC EX-1SG say-PST2.3SG
 ‘“I am under the stove”, he said.’
 (PoS_PrG_1964_Lyybyra_flk.093)

In other tenses and moods than the present tense indicative, locative and existential clauses resemble predicate nominals very much (see Section 8.2.1). The existential noun *bar* can formally be analyzed as nominal predicate here, whereby tense, mood and person-number suffixes are attached to a copula verb, either *e- ~ er-* or *būl-*. The choice of the copula verb depends on the tense and mood expressed and does not diverge from predicate nominals (see Section 8.2.1). The distinction of temporal and conditional readings by choice of the copula verb is active in locative and existential clauses, too. The copula *er-* exclusively forms temporals (617), whereas the copula *būl-* also forms conditionals (618).

- (616) THEME LOCATION LOCATION
Kirsa-lar bar e-ti-ler onno, Valačanka-ga.
 polar.fox-PL EX be-PST1-3PL there Volochanka-DAT/LOC
 ‘There were polar foxes there, in Volochanka.’
 (PoPD_KuNS_2004_Life_conv.PoPD.054)

- (617) THEME
 [...] *taba-lar-iŋ bar er-dek-terinen ke*
 reindeer-PL-POSS.2SG EX be-TEMP-3PL well
 LOCATION
d’iē-ge
 house-DAT/LOC
 ‘[It did something], when the reindeer were at home [recently].’
 (PoTY_2009_Aku_nar.050)

- (618) LOCATION [THEME]
E, čugas bar būl-lag-ina dūo igir-a:čči-lar ol
 eh close EX be-COND-3SG MOD call-HAB-3PL that
ba:biska eme:ksin-i
 midwife old.woman-ACC
 ‘Eh, if [the midwife] is close, they call this old midwife.’
 (SuAA_20XX_Birth_nar.019)

There are two more or less frequent but noticeable patterns regarding existential and locative clauses. In the present tense, indicative mood, the existential noun *bar* can be omitted, whereby person-number suffixes are directly attached to the locative predicate. This pattern occurs regularly with the interrogative pronoun *kanna* ‘where’ (619) but is not obligatory. Very seldom, the person-number suffixes are also attached to full noun phrases forming a locative predicate (620). From a broader perspective, this pattern resembles the functionally equivalent structures in other Turkic languages, but in Dolgan, it is rather exceptional than the standard means to express locative predication.

LOCATION, [THEME]

- (619) *Li:bira, kanna-gin=ij?*
 Lyybyra where-2SG=Q
 ‘Lyybyra, where are you?’
 (PoS_PrG_1964_Lyybyra_flk.093)

LOCATION, [THEME]

- (620) [...] *bu-lar aga-lari-gar-bin.*
 this-PL father-POSS.3PL-DAT/LOC-1SG
 ‘[I was ten years old, more than ten, twelve maybe, there they marry me off, I was brought up by them; this old man], I was with their father.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.064)

Finally, the existential noun *bar* may also be omitted in existential clauses, like in example (621). However, this pattern is quite rare and rather exceptional.

LOCATION THEME

- (621) *ĭenne:k ilim-ŋe horoŋ-nor aqaj.*
 broad net-DAT/LOC pike-PL only
 ‘In the broad net, there are only pikes.’
 (AkEE_19XX_BoySister_flk.169)

8.2.4 Possessive Clauses

Possessive clauses express a possessive relationship on the clause level. Therefore, they are also subsumed under the notion of *predicative possession*, which contrasts to *attributive/adnominal possession* describing a possessive relationship on the phrase level, namely in a noun phrase (see Sections 7.1.2.3 and 7.1.2.4). Possessive clauses and predicative possession have been dealt with in much detail in typological literature, the most influential studies being Heine (1997) and Stassen (2009). In Dolgan, possessive clauses frequently share their

structural properties with predicate adjectives (see Section 8.2.2). The possessor is realized as the subject of the clause, the possessee as the adjectival predicate. Thereby, the adjectival predicate is formed with the propriative suffix -LA:K.

- POSSESSEE, [POSSESSOR]
- (622) *Tuguptuō emiē kut-ta:k.*
 Tuguptuo also amulet-PROPR.3SG
 ‘Tuguptuo also has an amulet.’
 (AsKS_19XX_Amulet_nar.246)

From a typological point of view, the construction can unambiguously be classified as adhering to the *companion schema* (Heine 1997: 53–57) and being a *with-possessive* (Stassen 2009: 54–55), respectively.

In other persons than the third person singular and other tenses and moods than the present tense indicative, possessive clauses behave exactly like predicate nominals and adjectives. Thus, the person-number endings from set 1 (predicative endings; see Section 6.2) are attached either to the adjective itself or a copula verb if the latter carries tense and mood morphology. (623) and (624) exemplify this without being exhaustive since the pattern has already been discussed in detail in Sections 8.2.1 and 8.2.2.

- | | POSSESSOR | | POSSESSEE | |
|-------|-------------------------------------|------|----------------------------------|--|
| (623) | <i>Min</i> | | <i>emiē ira:kta:gi-la:k-pin.</i> | |
| | 1SG.PRO | also | czar-PROPR-1SG | |
| | ‘I also have a czar.’ | | | |
| | (ErSV_1964_WarBirdsAnimals_flk.106) | | | |

- | | | | POSSESSEE | [POSSESSOR] |
|-------|--|------------|---------------------|----------------|
| (624) | <i>Bilir</i> | <i>bir</i> | <i>d'aktar-da:k</i> | <i>e-ti-m.</i> |
| | long.ago | one | woman-PROPR | be-PST1-1SG |
| | ‘Long ago, I had a wife.’ | | | |
| | (MiAI_1964_OldPeasantOldWoman_flk.080) | | | |

In Däbritz (2018b: 35), it was stated that roughly nine-tenths of all possessive clauses in Dolgan exhibit this structure, which can be supported by the material analyzed here, being partly the same. Besides the pattern described above, there is a construction similar to existential clauses, including the possessor coded as dative-locative marked adverbial, the possessee coded as the subject of the clause and the existential noun *ba:r*, which carries inflectional mor-

phology. Typologically spoken, this construction, thus, adheres to *locative/goal schemas* (Heine 1997: 50–53, 59–61) and *locational possessives* (Stassen 2009: 48–50).

- | | | | | |
|-------|--|-------------|--------------------------|-------------|
| | POSSESSOR | | POSSESSEE | |
| (625) | <i>Bar kihîe-ke</i> | | <i>higiri: bar e-bit</i> | |
| | this human-DAT/LOC | dry.splints | EX | be-PST2.3SG |
| | 'This human apparently had dry splints.' | | | |
| | (BaRD_1930_HairyPeople_flk.020) | | | |

However, it has to be stated that this construction is relatively infrequent in Dolgan but nevertheless not negligible. Däbritz (2018b: 32–33) also mentions mixed structures, which—though indeed existing in spoken language—cannot be regarded as standard types, whence they are not discussed further here.

8.2.5 Comparative Clauses

Comparative constructions and comparative clauses have been studied by, among others, Stassen (1984, 2013). Following these works, the object of comparison is called *comparee* here, and the entity to which the comparee is compared is called *standard*. Within comparative constructions, three degrees of comparison have to be distinguished: equality, comparative and superlative.

Constructions expressing equality state that an entity exhibits some quality to the same extent as another entity. In Dolgan, such structures are similar to predicate adjectives. The comparee is the subject of the clause, the expressed quality is the adjectival predicate, and the standard is expressed by an adpositional phrase with the postposition *kördük* 'like'.

- | | | | | | |
|-------|---------------------------------------|-------------|---------------|---------------|-----------------|
| | COMPAREE | STANDARD | | QUALITY | |
| (626) | <i>Hukuj</i> | <i>ka:r</i> | <i>kördük</i> | <i>če:lke</i> | <i>būl-lun.</i> |
| | coat | snow | like | white | be-IMP.3SG |
| | 'The coat shall be as white as snow.' | | | | |
| | (PoNA_2004_SnowOwl_flk.048) | | | | |

The comparative degree expresses that an entity exhibits some quality to a higher extent than another entity. As for comparatives in Dolgan, it has to be stated first that there is no synthetic comparative degree form of adjectives. Thus, comparatives have to be expressed analytically. On phrase level, the standard is expressed by a noun phrase, showing either comparative or

more seldom ablative case morphology, and the adjective remains in its base form. The examples (627) and (628)—which are, of course, no instances of non-verbal predication—illustrate this.

- (627) [...], *m̥i:gin-ne:ger ulakan ira:kt̥a:gi-ga i:t-ia-m*.
 1SG.PRO-COMP big czar-DAT/LOC send-FUT-1SG
 ‘[Until the water comes in the next year, you will stay in prison], then I will send you to a czar bigger than me.’
 (SaSS_1964_NganasanBraveBoy_flk.112)

- (628) [...] *d’iē-tten ere ulakan, iürdiük baskūōj d’iē-ni*
 house-ABL EMPH big high beautiful house-ACC
kör-ūō-ŋ.
 see-FUT-2SG
 ‘[When you are in the centre of the town], you will see a house bigger, higher and more beautiful than any other house.’
 (ErSV_1964_WarBirdsAnimals_flk.312)

On clause level, the standard and its quality are expressed likewise, and the comparee is the subject of the clause. Therefore, the comparee can be expressed overtly like in example (629) or covertly like in example (630).

- | | | | |
|--|----------|--|----------|
| | COMPAREE | | STANDARD |
|--|----------|--|----------|
- (629) *Min kuturug-um n’u:čča bolot-u-na:gar*
 1SG.PRO tail-POSS.1SG Russian sword-POSS.3SG-COMP
 QUALITY
hiti:, [...].
 sharp
 ‘My tail is sharper than a Russian sword, [I’ll chop the larch completely, and then I’ll eat you, too].’
 (UkET_2002_FoxJayBuzzard_flk.019)

- | | | | |
|--|----------|--|---------------------|
| | STANDARD | | QUALITY, [COMPAREE] |
|--|----------|--|---------------------|
- (630) *A:t da bukat̥i:r-tan ulakan*.
 Aat EMPH hero-ABL big
 ‘He is even bigger than the hero Aat.’
 (ErSV_1964_WarBirdsAnimals_flk.506)

The superlative degree expresses that an entity exhibits a relevant quality to a higher degree than all other entities. In Dolgan, also the superlative degree is

expressed analytically. On phrase level, the particle *muŋ* ‘most’ is placed before the respective adjective, sometimes even modified by the particle *ha:maj* ‘most’ (< Russian *samyj* ‘id.’), like in (631).

- (631) *At-tar-da egeł, agis ha:maj muŋ kü:ste:k at*
 horse-PL-PART bring.IMP.2SG eight most most strong horse
tard-a:ččĭ min’igi-n.
 pull-HAB.3SG 1SG.PRO-ACC
 ‘Bring horses, [only] the eight strongest horses can pull me.’
 (ErSV_1964_WarBirdsAnimals_flk.163)

On clause level, the comparee is the overt or covert subject of the clause, and the quality is the adjectival predicate of the clause, like in example (632). Additionally, a “dummy” standard can be inserted, namely the universal quantifier *bari* ~ *barita* ‘all’. Formally, this gives rise to a comparative construction, but functionally the superlative degree is expressed. The “dummy” standard obligatorily stands in the ablative case, whereas the comparative case is ungrammatical here (633).

- (632) *A:n DOJDU ürdü-tü-nen* QUALITY [COMPAREE]
 world upper.part-POSS.3SG-INS most rich be-FUT-1SG
 ‘I’ll be the richest [person] around the world.’
 (AkEE_19900810_PearlBeard_flk.024)

- (633) *Kör-büt-e, bir d’iē bari-lari-ttan* COMPAREE “DUMMY” STANDARD
 see-PST2-3SG one house all-POSS.3PL-ABL
 QUALITY
ulakan.
 big
 ‘He looked, one house is bigger than all [others].’
 (BoND_1964_ThreeBrothers_flk.047)

8.3 Syntax of Adverbials

When discussing the syntax of adverbials, some essential theoretical preliminaries and delimitations have to be mentioned. First of all, *adverbial* has to be kept apart from the notion of *adverb*. Although adverbs fulfil the syntactic

function *adverbial* in the clause, not all adverbials are adverbs which can be easily shown by the following English example.

(634) *Due to the strike in public transport, many people went to work **by bike**.*

Besides that, adverbials are often described as “items that modify verbs” in contrast to attributes modifying nouns. This is undoubtedly often true, but adverbials can modify other constituents (e.g. an adjective like in (635)) or even whole clauses (636), too.

(635) *He was **extremely** afraid of the crocodile.*

(636) ***Probably**, we won't go to the zoo on Sunday.*

From a more syntactic point of view, this stands to reason to analyze adverbials as adjuncts to verb phrases—in contrast to subjects and objects as arguments. However, the adverbials in (635) and (636) are no adjuncts to the verb phrase but to something different. To put it in a nutshell: An adverbial is defined here as any kind of phrase in a clause (most often adverb phrases, noun phrases and adpositional phrases), which semantically modifies another constituent of the clause—apart from noun phrases—and syntactically adjoins to it. This gives rise to the problem of obligatory adverbials of verbs like *put* or *live* (in the sense of *reside*), which hardly can form grammatical clauses without an adverbial.

(637) a. *I am living in Hamburg.*
b. **I am living.* (if ≠ *I am alive.*)

(638) a. *I put the book on the table.*
b. **I put the book.*

It is a matter of debate whether obligatory and optional adverbials are analyzed identically or not concerning their underlying syntax and semantics. E.g. Apresjan (1992) argues in favour of ascribing argument status to obligatory adverbials. Since these theoretical issues can hardly be solved in a descriptive grammar, obligatory and optional adverbials are discussed together, nevertheless keeping an eye on possible divergences in their behaviour. Since the syntactic status of adverbials is, thus, partly not settled in the theoretical literature yet, a more functional and semantic approach is taken here. In what follows, the five most frequent classes of adverbials are discussed, starting from their functional domains, and analyzing their syntactic properties step by step.

Finally, a tentative conclusion on the general syntax of adverbials in Dolgan is drawn.

From a semantic point of view, adverbials can be grouped into various classes, the most frequent probably being spatial, temporal, modal/manner, contingency and degree adverbials (see also Hasselgård 2010 for a more elaborate classification). Spatial (or local) adverbials describe the local circumstances of an event. More specifically, a location itself (semantic role *locus* ~ *location*), a designated location (semantic role *goal*), an original location (semantic role *source*), and a location “accompanying” the event (semantic role *path*) can be expressed. In Dolgan, spatial adverbials corresponding to the semantic role *locus* ~ *location* can be expressed by noun phrases (639) or adverb phrases (640). Note that constructions with relational nouns (see Section 3.1.3) are also analyzed as complex noun phrases since the relational noun exhibits usual nominal morphology.

- (639) *Kulu:b-ka ülele:bit-im.*
 club-DAT/LOC work-PST2-1SG
 ‘I worked in a club.’
 (ZhNA_KuNS_20XX_LifeAndMusic_conv.ZhNA.039)

- (640) *Öldü:n-nere onno manna hit-al-lar.*
 leather.cover-POSS.3PL there here lie-PRS-3PL
 ‘The leather covers lie here and there.’
 (PoNA_19910207_Fishing_nar.010)

Rarely, also adpositional phrases occur, almost exclusively with the postposition *dîek* ‘to; towards’. This pattern is a semantic blend, rather meaning ‘in the direction of’ ~ ‘in the surrounding of’ than ‘towards’ in relevant contexts.

- (641) *Horok-tor tokto:-but-tar iti allara: pas’olak-tar dîek – [...].*
 some-PL stop-PST2-3PL that lower settlement-PL towards
 ‘Some stayed there around the lower villages—[in Khatanga, Kresty, Novaya and Kheta].’
 (BeES_1997_HistoryOfKatyryk_nar.017)

Spatial adverbials corresponding to the semantic role *goal* are formed by noun phrases (642), adpositional phrases (postpositions *dîek* ‘to; towards’ and *dîeri* ‘until; up to; (643)) and adverb phrases (644).

- (642) *Naril'skij-ga i:p-pit-tara.*
 Norilsk-DAT/LOC send-PST2-3PL
 'They sent [me] to Norilsk.'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.003)
- (643) *Tuj diē-n hūōpka-ga diēri sutka-ni*
 Tuj say-CVB.SEQ hill-DAT/LOC until day.and.night-ACC
bar-īa-ŋ.
 go-FUT-2SG
 'Until the hill named Tuj one drives one day and one night.'
 (AsKS_19XX_Amulet_nar.221)
- (644) *Hahil albun töttöörü hū:r-büt.*
 fox deceiver back run-PST2.3SG
 'The fox deceiver ran back.'
 (PoMA_1964_FoxDeceiver_flk.014)

Spatial adverbials corresponding to the semantic role *source* are expressed mainly by noun phrases (645). Additionally, adverb phrases with adverbs formed from demonstratives occur (646).

- (645) *He, guōrat-tan kel-bit īāllan-a.*
 AFF town-ABL come-PST2.3SG visit-CVB.SIM
 'Yes, he has come from town for a visit.'
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.032)
- (646) *Bar mantan!*
 go.IMP.2SG from.here
 'Go away from here!'
 (AsKS_19XX_Amulet_nar.128)

Spatial adverbials corresponding to the semantic role *path* are formed either by noun phrases (647) or by adpositional phrases containing the postposition *üstün ~ ustun* 'through; along' (648).

- (647) *Ma: kine:s bajgal bu:h-u-nan [...] bar-ar.*
 this prince sea ice-POSS.3SG-INS go-PRS.3SG
 'The prince goes over the ice of the sea [to cut an ice hole for catching belugas].'
 (BaA_1930_OneEyedGirl_flk.003)

- (648) *Hahil-ij kitil ustun bar-bit, balik u: ustun.*
 fox-POSS.2SG shore along go-PST2.3SG fish water through
 'The fox went along the shore, the fish through the water.'
 (FeA_1931_OldWomanFoxFur_flk.013)

Depending on their information structural functions, spatial adverbials can be placed nearly everywhere in the clause (see Section 10.2). The primary position of spatial adverbials seems to be before the verb phrase, including subject and objects. Diagnostic clauses exhibit non-topical complements of the verb and optimally a maximal (wide) focus so that neither topic nor focus influence the word order. In example (649), these requirements are fulfilled, and the spatial adverbial is positioned between a temporal adverbial and the subject of the clause.

- (649) *Kihin bajgal-ga d'ura:k-tar bölüge-le:-čči-ler.*
 in.winter sea-DAT/LOC Nenets-PL beluga-VBZ.CAPT-HAB-3PL
 'In winter, the Nenets people hunt belugas in the sea.'
 (BaA_1930_OneEyedGirl_flk.002)

Temporal adverbials can be expressed by noun phrases (650), adpositional phrases (651) and adverb phrases (652). However, the borderline between noun phrases and adverb phrases is fuzzy since items like *kihin* 'winter; in winter' or *harsin* 'tomorrow's day; tomorrow' can behave like nouns and adverbs (see also Section 3.6.1.1).

- (650) *Üh-üs kün-ü-ger ep-pit-in*
 three-ORD day-POSS.3SG-DAT/LOC say-PTCP.PST-POSS.3SG.GEN
kurduk oŋor-but-tar.
 like make-PST2-3PL
 'On the third day, they did as it was said.'
 (BaRD_1930_DaughterOfUrungAjyy_flk.052)

- (651) *Horok hir-e kihin-i biha hi:kej buōl-ar.*
 some place-POSS.3SG winter-ACC during ice.hole be-PRS.3SG
 'At some places, there are ice holes during the winter.'
 (ErSV_1964_WarPartridgesPikes_flk.014)

- (652) *Kihin mas-t-ir onton abirat-ar.*
 in.winter wood-VBZ-PRS.3SG then chop.wood-PRS.3SG
 'In winter, she gathers wood and chops it.'
 (AkEE_19900810_GirlAnys_flk.006)

Regarding the linear position of temporal adverbials, the same assumptions as for spatial adverbials can be made. Principally, they can occupy all positions in the clause, their basic position probably being immediately before the verb phrase, including subjects and objects. Example (653) illustrates this, the explanation being the same as in the case of example (649) above.

- (653) *Ol očiha-ka:ŋ-ŋa kîêhe a:ji ûot ubaj-ar*
 that tent-DIM-DAT/LOC evening at.every light flame.up-PTCP.PRS
bûôl-but.
 become.AUX-PST2.3SG
 'In the small tent, light flamed up every evening.'
 (BaA_1930_FireInSmallTent_flk.002)

Modal/manner adverbials are somewhat more complicated to analyze. Roughly spoken, modal/manner adverbials specify how or in which way an event is happening. One group of modal/manner adverbials is formed by referring items, which can correspond, e.g. to the semantic roles *instrument*, *quality* or *accompaniment*. Such referring adverbials are linguistically expressed by noun phrases ((654) and (655)), adpositional phrases (656) or adverb phrases (657).

- (654) *Lodka-nnan katatsa-l-i:r e-ti-bit.*
 boat-INS ride-VBZ-PTCP.PRS AUX-PST1-1PL
 'We were going by boat.'
 (AnKA_2009_Games_nar.006)
- (655) *Hirga d'îe öldü:n-e taba tiri-ti-nen*
 sledge house leather.cover-POSS.3SG reindeer fur-POSS.3SG-INS
oŋohu-ll-a:čči.
 make-PASS-HAB.3SG
 'The cover of the sledge house is made of reindeer fur.'
 (AkEE_19900810_GirlAnys_flk.013)
- (656) *Ūol delemiče: ûôr-ü kitta ka:l-bit.*
 boy free.running.domestic.reindeer herd-ACC with stay-PST2.3SG
 'The boy stayed with the herd of free-running domestic reindeer.'
 (PoKK_1964_TwoOrphanBoys_flk.102)
- (657) *Togo ke iti o-non-ma-nan keps-i-git, ile-li:*
 why well this that-INS-this-INS tell-PRS-2PL real-SIM
kepse:-bek-kit oloŋko-gutun?
 tell-NEG.PRS-2PL tale-POSS.2PL.ACC

‘Why do you tell like this and that, why don’t you tell your tale correctly?’

(UkET_AkEE_19940424_SongsTales_conv.UkET.095)

Such manner/modal adverbials, which modify the verb phrase, syntactically appear to behave like the spatial and temporal adverbials discussed above. In maximally focused sentences with a non-topical subject, manner/modal adverbials tend to precede the subject. However, it has to be mentioned that there are very few meaningful examples in the analyzed material so that further research is needed. Example (658) nevertheless shows the most common pattern.

- (658) *BİRde kara:b-i-nan ira:ktɑ:gi-lara ölbüğe komuj-a*
 once ship-POSS.3SG-INS czar-POSS.3PL tax gather-CVB.SIM
kel-er.
 come-PRS.3SG
 ‘Once their czar comes on his ship to gather taxes.’
 (BaA_1930_OneEyedGirl_flk.028)

Additionally, modal/manner adverbials may evaluate the given event from the speaker’s perspective. Such adverbials typically scope over the verb phrase or even the whole clause. The latter, thus, are often called sentence adverbials, too. These adverbials tend to be realized clause-initially when scoping over the entire clause (659) and before the verb phrase when scoping over the verb phrase (660).

- (659) *Araj onno ulaga:-ga hahil kül-er-e*
 suddenly there corner-DAT/LOC fox laugh-PTCP.PRS-POSS.3SG
ihilin-n-e.
 be.heard-PST1-3SG
 ‘Suddenly, in the corner there, the laughter of foxes was heard.’
 (FeA_1931_OldManUkukuutFox_flk.046)
- (660) *Bu ogonn’or-uy araj dünjür ogus-t-a.*
 this old.man-POSS.2SG suddenly shaman.drum beat-PST1-3SG
 ‘The old man suddenly beat the shaman’s drum.’
 (FeA_1931_OldManUkukuutFox_flk.042)

However, several adverbials expressing epistemic modality (e.g. *bihila:k* ‘apparently’, *badaga* ‘probably’) tend to be realized verb-adjacently, mostly following it.

- (661) *Ol d'ie-ke:n-e hu:l-an tüh-üög-e,*
 that house-DIM-POSS.3SG crash-CVB.SEQ fall.AUX-FUT-3SG
badaga, savs'em.
 probably at.all
 'That little house will probably collapse completely.'
 (SuON_KuNS_19990303_HardLife_conv.SuON.227)

The next group to be discussed here is composed of adverbials expressing contingency. Generally, these adverbials can be defined as answering the questions *why*, *to what purpose* or alike. These adverbials are formed by noun phrases (662) and adpositional phrases ((663) to (665)) in Dolgan. As for their syntactic behaviour, it can be said that they essentially behave like the spatial and temporal adverbials discussed above. Modifying the verb phrase, they are positioned before the verb phrase (like in (664)), but due to pragmatic reasons, they can indeed occur in other positions in the clause.

- (662) *Talak-tar ejmejñ-i:l-ler tiäl-tan, [...].*
 bush-PL move-PRS-3PL wind-ABL
 'The bushes are moving because of the wind, [two bushes are not moving].'
 (AkEE_19900810_ReindeerMouse_flk.011)
- (663) [...] *emîe bir taba ihin hut-ta:bit-tara.*
 also one reindeer because.of court-VBZ-PST2-3PL
 'Yes, Mitrofan got crazy and died], they condemned him also because of one reindeer.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.169)
- (664) *Mašina kihi ihin bi:r holotuøj karči-ni bîer.*
 machine human for one golden money-ACC give.IMP.2SG
 'Give me one golden coin for the machine-human.'
 (PoNA_19900322_PoorBoyDevil_flk.206)
- (665) *H-ol ere:ri kini d'ulaj-bit küniis*
 EMPH-that despite 3SG.PRO be.rather.afraid-PST2.3SG by.day
bar-iäg-in.
 go-PTCP.FUT-POSS.3SG.ACC
 'But still, he was rather afraid to go by day.'
 (BaRD_1930_HairyPeople_flk.005)

Finally, there is the group of degree adverbials. They express to what extent a given event is accomplished or to what extent a given quality is available. In the former case, they modify the verb phrase or the verb itself, and in the latter case, they modify an attribute or other adverbials. Degree adverbials, modifying the verb or the verb phrase, stand verb-adjacently ((666) to (668)). They are seldom placed in other positions in the clause, which has apparently two reasons: On the one hand, they are more closely bound to the verb than other adverbials. On the other hand, they are non-referring items, whence, e.g. they cannot function as topics in the clause, limiting their interaction with information structuring. Degree adverbials modifying attributes or adverbials stand adjacently to the given item ((669) and (670)). As for their form, degree adverbials are formed mainly by adverb phrases in Dolgan.

- (666) *Ol uol aga-ta čenki-čči bagar-bat*
 that boy father-POSS.3SG **completely-ADVZ** love-NEG.PRS.3SG
kihi-ni.
 human-ACC
 'The boy's father does not like people at all.'
 (BeAM_199X_HumanInLandOfDeath_flk.004)
- (667) *Z'ina hiēse kömöloh-ör, Z'ina ečikij.*
 Zina **a.little** help-PRS.3SG Zina my.dear
 'Zina is helping a bit, Zina, my dear.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.215)
- (668) *Ūögü: onn-u-gar aričči hipsiginej-bit.*
 shout place-POSS.3SG-DAT/LOC **hardly** whisper-PST2.3SG
 'Instead of a shout, he hardly whispered.'
 (AsKS_19XX_Amulet_nar.119)
- (669) *Ürüŋ_Kaja-ŋ hir-e hürde:k d'a:ŋi hir.*
 Ürüŋ.Kaya-POSS.2SG place-POSS.3SG **very** poor earth
 'The territory of Ürüŋ Kaya is very stark land.'
 (ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.055)
- (670) *Onno bert üčügej-dik bihigiti-n tohuj-du-lar, tu:s-ta:k*
 there **very** good-ADVZ 1PL.PRO-ACC receive-PST1-3PL salt-PROPR
kilēb-i-nen.
 bread-EP-INS
 'We were received there very well, with salt and bread.'
 (UkOA_2010_Festival_nar.UkOA.005)

The explications above show that the syntax of adverbials in Dolgan is manifold and not easy to summarize. However, there are several prevailing tendencies. First, adverbials are formed by noun phrases, adpositional phrases and adverb phrases. Second, adverbials primarily modify verbs, verb phrases or the whole clause. Degree adverbials, however, also modify attributes and other adverbials. As for the position of adverbials in the clause, it is essential to have in mind word order permutations due to information structure (see Section 10.2). However, the analyzed material has shown that adverbials tend to be realized immediately before (or more seldom after) the constituent they modify. The most frequent adverbials (spatial, temporal and contingency adverbials modifying the verb phrase) are placed between topical constituents and the verb phrase, including the subject and the object. Adverbials that modify the whole clause (most often modal/manner adverbials expressing the speaker's evaluation of the given event) are placed clause-initially, even before topical constituents (see Sections 10.1 and 10.2 for a detailed discussion).

Finally, it should be said that the syntactic realization of adverbials in Dolgan often follows the described patterns. Nevertheless, there are many instances in the analyzed material that do not adhere to them. Therefore, further research is highly needed in this field, including the status of obligatory adverbials.

8.4 Non-declarative Clauses

Already in the context of mood and modality (Section 6.5), the notion of *illocution* was touched upon. According to Austin (1979 [1962]: 117), the illocution of an utterance in a discourse determines its function within it, whether it is an assertion, a question, a command or the like. Since clauses—which are, roughly spoken, the linguistic expressions of utterances—fulfil a specific pragmatic function in discourse, they can be categorized according to the latter. Declarative clauses, which were discussed in the previous sections, are associated with assertions, whereas imperative and interrogative clauses are associated with commands and questions, respectively (Hengeveld 2004: 1191). The following sections discuss the syntax of imperative and interrogative clauses separately since it at least partly diverges from the syntax of declarative clauses.

8.4.1 Syntax of Imperatives

From a pragmatic point of view, imperative clauses correspond to directive illocutionary acts, i.e. commands, order, or requests (Searle 1975: 355; Gusev 2013: 11). It is not far to seek that the most frequent domain of directives and their relevant linguistic expressions is the second person since prototypic-

ally, the speaker addresses the hearer when commanding, ordering or requesting (Gusev 2013: 29–30). It is an ongoing debate whether directives can be addressed to first and third persons, too. Here, I follow Gusev (2013) and hold the view that all three persons can occur in the context of directive illocutionary acts and, thus, in imperative clauses (see also Section 6.5.9).

Imperative clauses in Dolgan are tightly linked to the imperative mood on the verbal predicate (or the copula verb in the case of non-verbal predicates). Thus, imperative mood morphology is sufficient for analyzing a clause as an imperative one. The examples (671) and (672) show imperative clauses with a verbal predicate (671) and a non-verbal predicate (672), respectively, either exhibiting second-person singular marking.

- (671) *Taba-gin köliĵ.*
 reindeer-POSS.2SG.ACC harness.IMP.2SG
 ‘Harness your reindeer.’
 (BoND_1964_ThreeBrothers_flk.037)
- (672) *Onnuk bul-čut buōl, mannik ač-čit buōl.*
 such haul-AGN be.IMP.2SG such food-AGN be.IMP.2SG
 ‘Be such a hunter, be such a provider.’
 (SuAA_20XX_NameGiving_nar.013)

However, predicates exhibiting potential-admonitive mood morphology can also occur in imperative clauses because this mood expresses warnings and prohibitions (see Section 6.5.11). Since warnings and prohibitions correspond to directive illocutionary acts, examples like (673) and (674) must also be analyzed as imperative clauses.

- (673) *“D’e in-ti-gitin tohut-a:ja-gin”, herep-pit*
 well that-POSS.3SG-POSS.2PL.ACC break-ADM-2SG warn-PST2.3SG
ogonn’or.
 old.man
 ‘“Well, don’t break it”, the old man warned.’
 (PoKK_1964_TwoOrphanBoys_flk.285)
- (674) *Či:ča:k üliü-tün ti:t-a:ja-gin!*
 small.bird share-POSS.3SG.ACC touch-ADM-2SG
 ‘Don’t touch the small bird’s share!’
 (ErSV_1964_WarBirdsAnimals_flk.103)

As can be seen in all examples, there are no overt subjects in the clauses. This is undoubtedly expected since in the context of second-person imperatives, the addressee of the directive illocutionary act is clear from the extra-linguistic context and need not be coded linguistically. However, it has to be mentioned that the realization of a subject is possible in the given context in Dolgan, mainly to evoke a contrastive reading. In example (675), the speaker has told that his guards have died before, whence he now asks the hearer of the given utterance to guard him in the next night. Two circumstances show that *en* is indeed a subject and not simply an address: It is placed within the clause and not at its edge, and—even more importantly—it is by no means separated from the clause intonationally.

- (675) *Ol ihin en bügün kete: minîe-ke.*
 that because 2SG.PRO today guard.IMP.2SG 1SG.PRO-DAT/LOC
 ‘Therefore, you guard for me today.’
 (PoNA_19900322_PoorBoyDevil_flk.015)

In the case of third-person imperatives, the subject is more often overtly realized since full noun phrases can also function as subjects.

- (676) *Onton ıra:ktɑ:gî balik-t-i: bar-dîn.*
 then czar fish-VBZ-CVB.SIM go-IMP.3SG
 ‘Then the czar shall go fishing.’
 (ChPK_1970_ThreeBoys_flk.021)
- (677) *D'on-nor kurum diê-n kel-be-tinner, [...]*
 people-PL wedding say-CVB.SEQ come-NEG-IMP.3PL
 ‘People shall not come thinking that [there is] a wedding; [who wants to save his soul shall go far away].’
 (BaRD_1930_DaughterOfUrungAjyy_flk.051)

In Section 6.5.9, it is argued that Dolgan distinguishes three number values in first-person imperatives, namely singular, plural and dual. This raises the question of whether there can be an overt subject in the first person dual since Dolgan only has a first-person singular (*min*) and a first-person plural (*bihigi*) pronoun. Apparently, there are two strategies to fill this gap in the paradigm: Either the first-person plural pronoun (678) is used, or the first-person singular pronoun and the postposition *bihikki* ‘together with me’ (679).

Context: The young czar said: “My darling, it is not possible to have two czars in one country”.

(678) *Bihigi araks-îak.*
1PL.PRO separate-IMP.1DU
‘Let us [two] part company.’
(PoMA_1964_YoungCzar_flk.123–124)

(679) *Bir d’îe-ge d’îe-len-îek en*
one house-DAT/LOC house-VBZ-IMP.1DU 2SG.PRO
bihikki.
together.with.me
‘Let us [two] live together in one house.’
(ErSV_1964_WarBirdsAnimals_flk.046)

Direct objects in imperative clauses are formally marked like in declarative clauses, showing nominative, accusative or partitive case marking. However, the analyzed data shows clearly that the partitive case occurs relatively more often in imperative clauses, whereas the nominative case is only marginal here. Thereby, the occurrence of the accusative case seems to be constant. Chart 165 summarizes direct object marking in both declarative and imperative clauses from a quantitative point of view.

CHART 165 Object marking in declarative and imperative clauses

Case	Declarative		Imperative	
	Absolute	Relative	Absolute	Relative
Nominative	216	16,7 %	3	1,2 %
Accusative	1,053	81,5 %	198	79,5 %
Partitive	23	1,8 %	48	19,3 %
Total	1,292	100 %	249	100 %

The statistics imply that the partitive case “replaces” the nominative case in imperative clauses. In Section 8.1.3, it is argued that direct objects marked with either the nominative or the partitive case are prototypically indefinite and non-specific. Moreover, it was said that objects marked with the partitive case are often not yet existent at the moment of speech. These constraints undoubtedly fit well to directive illocutionary acts and imperatives as their

linguistic expressions since requests, commands or alike are concerned with future actions.

The basic word order pattern in imperative clauses is SOV, yielding verb-final structures. However, there is much variation due to the information structural properties discussed in Section 10.2. Direct objects, marked with the partitive case, always stand immediately verb-adjacently in imperative clauses. Again, this is a clear correspondence to unmarked objects in declarative clauses due to their above-mentioned structural similarities.

8.4.2 *Syntax of Interrogatives*

Interrogative clauses pragmatically correspond to questions, which, in turn, are directive speech acts since they are an attempt of the speaker to get the hearer to do something, namely to answer (Searle 1975: 355–356). From a semantic point of view, questions can be divided into two subcategories, polar questions and content questions, which will be discussed separately in the following sections.

8.4.2.1 Polar Questions

Polar questions are concerned with the truth value of the proposition of a clause. Prototypically, polar questions scope over the whole clause and the whole proposition (680). But polar questions can also scope over a single constituent of the clause. In this case, they ask for the truth value of a specific part of the proposition (681). Here, the speaker is describing a picture, in which it can be seen that a man comes to a group of people, but there is no information about who these people are. So this is what the speaker is unsure about and, thus, asks for. Polar questions are marked with the interrogative particle *dūō* ~ *du* in Dolgan.

- (680) *Mun-tan ist-e:čči dūō?*
 this-ABL hear-HAB.3SG Q
 'Is it [= the speaker's voice] audible from here?'
 (KiPP_NN2_2009_Family_nar.KiPP.001)
- (681) *Birde dūō, îâl-lar-ga dūō, îâld'it kel-bit?*
 once Q family-PL-DAT/LOC Q guest come-PST2.3SG
 'A guest has come once, to a family?'
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.009)

The interrogative particle is placed immediately after the constituent that is asked for. If the question scopes over the whole clause, the interrogative

particle tends to be placed clause-finally in verb-final structures like in example (680). In clauses, which diverge from this pattern, the interrogative particle tends to be placed immediately after the predicate. In the example (682), the speaker asks whether it is the case that the hearer protects the named person and not whether the action itself is protecting (in contrast to, e.g. betraying, supporting). Thus, the question scopes over the whole proposition and clause, respectively, and the interrogative particle is placed directly after the verb.

- (682) *En kömüsk-ü:-gün duō ol kihi-ni?*
 2SG.PRO protect-PRS-2SG Q that human-ACC
 'Do you protect this man?'
 (SaSS_1964_NganasanBraveBoy_flk.084)

As can be seen in the examples, the word order in interrogative clauses does not differ from declarative clauses apart from the existence of the interrogative particle itself.

8.4.2.2 Content Questions

In contrast to polar questions, content questions are not concerned with the truth value of propositions but ask for information missing from both the linguistic and the extra-linguistic context. This missing information is linguistically expressed by an interrogative pronoun (see Section 3.3.2.4), which can fulfil any kind of syntactic function in the clause. In the example (683), the speaker sees that the hearer is going somewhere, and now he asks where the hearer is going.

- (683) *"Kaja, kugu, kajdiēk bar-a-gin?", diē-bit.*
 well small.child whereto go-PRS-2SG say-PST2.3SG
 "Well, my little, where are you going?" he said.
 (KiMN_19900417_Milkmaid_flk.129)

Additionally, the interrogative clitic =(I)j can occur in the clause, which is not obligatory, however. If the clitic occurs in the clause, it is attached to the predicate ((684) and (685)) or eventually to a copula verb (686).

- (684) [...] *kačča-ttan haka-li: üörep-pik-kit=i?*
 when-ABL Dolgan-SIM teach-PST2-2PL=Q
 '[Remembering those years], since when were You teaching in Dolgan?'
 (BeEI_KuNS_1998_Teacher_conv.KuNS.044)

- (685) *Kas kihi-git=ij?*
 how.many human-2PL=Q
 ‘How many people are you?’
 (AkEE_19XX_BoySister_flk.047)
- (686) *Kim e-t-e=j hurullar-a?*
 who be-PST1-3SG=Q surname-POSS.3SG
 ‘What was his surname?’
 (MaPX_KuNS_200X_YakutsOfEssej_conv.KuNS.009)

The position of the interrogative pronoun in the clause varies, whereby three patterns appear regularly. First, the interrogative pronoun can be placed in situ, i.e. in the position of the constituent asked for. In example (687), the interrogative pronoun *kim* ‘who’ is the subject of the clause, and it occupies the usual subject position after a VP-modifying adverbial and before the direct object.

- (687) *Urut kim bihigi-ni kim-n-îe, munn'-a:čči*
 earlier who 1PL.PRO-ACC who.PH-VBZ-FUT.3SG gather-PTCP.HAB
e-t-e=j [...].
 AUX-PST1-3SG=Q
 ‘Who did whatchamacallit, gather us earlier [saying “sing and so on”]?’
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.109)

Second, the interrogative pronoun can appear immediately preverbally. This pattern can be explained by the circumstance that information, which is asked for, usually belongs to the focus domain of the clause. It is asserted and highly important for the speaker—otherwise, they would not ask for it. As the most salient focus position is the immediately preverbal position in Dolgan (see Section 10.2), it is logical that interrogative pronouns can be placed there.

- (688) *Ol kihi-ni kajdak tal-li-lar, [...]?*
 that human-ACC how choose-PST1-3PL
 ‘How did they choose this man, [this Pyotr, right]?’
 (KiPP_KuNS_200211_LifeChildren_conv.KuNS.009)

Finally, the interrogative pronoun can also be placed clause-initially, preceding all verb arguments.

- (689) *Kahan min en'igi-n kör-ûö-m?*
when 1SG.PRO 2SG.PRO-ACC see-FUT-1SG
 'When will I see you?'
 (PoNA_19900810_TripToVoloChanka_nar.125)

The material analyzed here gives no hint to possible conditions for the clause-initial position of interrogative pronouns. Apparently, the structure of the clauses in the preceding examples is comparable. Nevertheless, the pronoun is placed in situ in example (687), immediately pre-verbally in example (688), but clause-initially in example (689). Neither is the choice of the interrogative pronoun decisive for its position: All interrogative pronouns can occur in all relevant positions. Whether the position of interrogative pronouns in content questions is indeed an instance of free variation or whether there are yet undetected rules remains an open question for further research.

8.5 Negation in Simple Clauses

The complex of negation is manifold, concerning many morphological forms and morphosyntactic patterns. Given the structure of the grammar at hand, not all aspects of negation can be covered within this section, which is devoted to negation in simple clauses, touching both clausal and constituent negation. The morphological aspects of negation, in turn, are presented at other places in the grammar as follows: Section 3.1.4 (negative existential noun *hûök*), Section 3.3.2.6 (negative polarity items), Section 6.3 (negative non-finite verb forms), Section 6.4 and 6.5 (negative finite verb forms). See also Siegl 2020 for an onomasiological account to negation in Dolgan.

8.5.1 Clausal Negation

8.5.1.1 Standard Negation

Standard negation designates constructions that modify a verbal, non-declarative simple clause, expressing that its underlying proposition is not true in the given context (Miestamo 2005: 42). In Dolgan, the default expression of standard negation replaces an affirmative verb form with the correlating negative verb form (see Sections 6.4 and 6.5 for the paradigms). Example (690) exhibits the affirmative third-person singular present tense form of *kör-* 'see', whereas the correlating negative form occurs in example (691). Since the clauses are otherwise morphosyntactically identical (omitted pronominal subject, direct object in accusative case), it can be concluded that affirmative and negative clauses differ only in the verb form included.

- (690) *Kör-ör uraha d'ie-tin, [...].*
 see-PRS.3SG pole tent-POSS.3SG.ACC
 'He sees a pole tent, [covered with leather covers sewed from white reindeer skins].'
 (AsKS_19XX_Amulet_nar.175)
- (691) *Ūol-u kör-böt.*
 boy-ACC see-NEG.PRS.3SG
 'He does not see the boy.'
 (AkEE_19XX_BoySister_flk.026)

From a typological perspective, standard negation in Dolgan is challenging to classify since it oscillates between symmetric and asymmetric patterns (Siegl 2020: 243). To give an example: The simple past tense (see Section 6.4.2.1) adheres to symmetric negation since the negative suffix -BA is mechanically inserted between the stem and the tense suffix, cf. *aha:-ti-m* 'eat-PST1-1SG' vs *aha:-ba-ti-m* 'eat-NEG-PST1-1SG', *aha:-ti-ŋ* 'eat-PST1-2SG' vs *aha:-ba-ti-ŋ* 'eat-NEG-PST1-2SG' et cetera. On the contrary, the habitual (see Section 6.4.5) shows asymmetric negation since the existential noun *hūōk* is inflected for person and number, co-occurring per default with the third-person singular form of the habitual participle of the given verb: *aha:-čči-bin* 'eat-HAB-1SG' vs *aha:-čči-ta hūōk-pun* 'eat-PTCP.HAB-POSS.3SG NEG-1SG', *aha:-čči-gin* 'eat-HAB-2SG' vs *aha:-čči-ta hūōk-kun* 'eat-PTCP.HAB-POSS.3SG NEG-2SG' et cetera. Many other tense-aspect and mood forms exhibit features of both patterns so that a fine-grained typological evaluation would require much more space than a descriptive grammar can allot.

Non-declarative clauses do not differ from declarative clauses when negated. In imperative clauses, the needed negative imperative form (see Sections 6.5.9 and 6.5.10) replaces its affirmative counterpart (692).

- (692) *"Minigi-n tūōk kihalli-ma-ŋ", d-i:r.*
 1SG.PRO-ACC what worry-NEG-IMP.2PL say-PRS.3SG
 "Do not worry about me", he says.'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.067)

Polar questions (693) contain the needed negative verb form and the interrogative particle *dūō ~ du:* like their affirmative counterparts. Content questions (694) include the required negative verb form and the given interrogative pronoun. Like in their affirmative counterparts, the interrogative clitic =(I)j facultatively appears at the predicate or the interrogative pronoun.

- (693) *Kör-bök-kün dūō?*
 see-NEG.PRS-2SG Q
 ‘Don’t you see?’
 (UkET_2002_FoxJayBuzzard_flk.029)
- (694) *Kim taj-im-îa=j ol tobuk oŋuōg-un?*
 who guess-NEG-FUT.3SG=Q that knee bone-POSS.3SG.ACC
 ‘Who would not recognize that knee bone?’
 (NaLE_2002_StonyBone_flk.031)

Negative polarity items like *kim da* ‘somebody; anybody’ or *kanna da* ‘some-where; anywhere’ obligatorily need to be licensed by a negative predicate if they shall convey a negative reading. If the verbs in (695) and (696) were not negated, the polarity items *kim da* and *kaččaga da* would mean ‘somebody’ and ‘sometimes’, respectively.

- (695) *Kim da arij-bat.*
 who INDF open-NEG.PRS.3SG
 ‘Nobody opens [the door].’
 (PoS_PrG_1964_Lybyra_flk.065)
- (696) *Ta:k da me:ne kaččaga da oloŋko-lo-s-pop-put*
 so EMPH simply when INDF tale-VBZ-RECP-NEG.PRS-1PL
būō.
 EMPH
 ‘And so, we simply never tell tales to each other.’
 (UkET_AkEE_19940424_SongsTales_conv.UkET.112)

As there is only one negation within the given structures—both semantically and morphosyntactically—it is expected that more than one negative polarity item can be chained in a clause, like in example (697). Consequently, only the first indicated reading is possible since the second reading semantically contains two negations (see Penka 2020 for a theoretical semantic account).

- (697) [...], *kim da kim-i da ülele-p-pet.*
 who INDF who-ACC INDF work-CAUS-NEG.PRS.3SG
 ‘[By forcing them], nobody makes anybody work.’ ~
 *‘[By forcing them], nobody makes nobody work.’
 (ChNM_2009_Vika_nar.021)

Although these structures resemble negative concord patterns (see Giannakidou 2000, Penka 2020), Dolgan is not a negative concord language in the narrow sense of the term. In contrast to, e.g. Russian *nikto* ‘nobody’ or Hungarian *semmi* ‘nothing’, the Dolgan negative polarity items have no intrinsic negative semantics. This can be proven by negative fragmentary answers, like the constructed example (698). Since there is no negator in the reply that could license the negative polarity item *kim da* ‘somebody; anybody’, it must be interpreted as a positive indefinite pronoun.

- (698) a. *Kim kel-l-e?*
 who come-PST1-3SG
 ‘Who came?’
- b. *Kim da.*
 who INDF
 ‘Somebody.’ ~ *‘Nobody’.
 (constructed examples)

From a comparative point of view, Dolgan completely adheres to the typical Turkic pattern, not exhibiting negative indefinite pronouns and thus not displaying negative concord (Johanson 2021: 528).

8.5.1.2 Negation of Non-verbal Predication

The negation of non-verbal predication is more complex than verbal predication since different types of non-verbal predicates behave differently. Therefore, it makes sense to discuss them separately in this section.

Negated predicate nominals and adjectives, as a rule, contain a negative verb form of the copula verb *būōl-*. The morphological form is most frequently the negative postterminal evidential past tense (see Section 6.4.2.3), but it does not necessarily refer to the past. In example (699), a general statement is made, and in example (700), the speaker refers even to the future. In the latter example, it is additionally worth mentioning that the phrase *kihi būōl-* literally means ‘be/become a human’, but is a paraphrase of ‘be alive; survive’. Example (701), finally, displays a negated predicate adjective, again making a general statement without a concrete time reference.

- (699) *Tu:s bu:s būōl-batak, timni:-ni biēr-bet.*
 salt ice be-NEG.PST2.3SG cold-ACC give-NEG.PRS.3SG
 ‘Salt is no ice, it does not give [any] cold.’
 (PoNA_19910207_Fishing_nar.086)

- (700) *Min* [...], *e*, *kihi* *būōl-batak-pin*.
 1SG.PRO eh human be-NEG.PST2-1SG
 ‘I, [eh, will survive], eh, will not survive [in either case].’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.067)
- (701) *On-tu-ŋ* *emîe türgen da* *būōl-batak*,
 that-POSS.3SG-POSS.2SG also fast EMPH be-NEG.PST2.3SG
d’ogus da *būōl-batak*, [...].
 easy EMPH be-NEG.PST2.3SG
 ‘That is also not fast, also not easy, [the women, it is a very hard job for the women].’
 (BeES_2010_HidePreparation_nar.024)

As for its form, the negative past tense marker -BA_tAK is often shortened to -tAK (see Section 6.4.2.3).

- (702) [...] *iti ehigi kî:s-kit* *būōl-tak* *dūō?*
 that 2PL.PRO daughter-POSS.2PL be-NEG.PST2.3SG Q
 ‘[There in Novorybnoe, a girl is called Marina Beregovaya], isn’t she your daughter?’
 (UkET_AkEE_19940424_SongsTales_conv.AkEE.014)
- (703) *Tuku:-lar min kün eme:ksin e-ti-m kaja aba:hi*
 dear-PL 1SG.PRO sun old.woman be-PST1-1SG well devil
būōl-tap-pin.
 be-NEG.PST2-1SG
 ‘My dear [people], I was an old woman of the sun, I am no devil.’
 (KiPP_2009_Syndassko_nar.085)

In the case of predicate adjectives, there is another concurring strategy to express negation. Instead of an “affirmative” adjective, combined with a negative form of the copula verb *būōl-*, it is also possible to use a caritive adjective. As described in Section 12.1, caritive adjectives are formed with a general possessive suffix (etymologically third person singular) and the negative existential noun *hūōk*: The counterpart of *kū:ste:k* ‘powerful’ is *kū:h-e hūōk* ‘force-POSS NEG’ = ‘weak; powerless’. If such an adjective occurs in the predicate position, no copula is used for negation in the present tense. Still, the person-number suffixes are directly attached to the negative existential *hūōk* ((704) and (705)). In other tenses and moods, the regular copula verbs are used with caritive adjectives, too (706). The clause additionally shows that negative comparative clauses are structurally identical to other predicative adjectives.

- (704) *D'aktat-tar-a örü-te huök-tar.*
 woman-PL-POSS.3SG **plaited-POSS NEG-3PL**
 '[The hair] of the woman is not plaited.'
 (PoNA_19900810_Tojo0InVoloChanka_nar.019)
- (705) *En kördük kopsok-ko kaha:n-ar kü:h-e*
 2SG.PRO like storage-DAT/LOC store.up-PTCP.PRS **force-POSS**
huök-pun.
NEG-1SG
 'I am not as powerful as you to store up [food] in the storage.'
 (ErSV_1964_WarBirdsAnimals_flk.021)
- (706) *U: iççi-te minigin-ne:ger kubulgat-a huō*
 water master-POSS.3SG 1SG.PRO-COMP **slyness-POSS NEG**
būōl-uō, badaga.
become-FUT.3SG probably
 'The master of water won't be slier than I, apparently.'
 (AkEE_19900810_PearlBeard_flk.061)

In locative and existential clauses, the negative existential noun *huök* 'there is not' replaces its affirmative counterpart *bar* 'there is', as shown in examples (707) and (708).

- THEME LOCATION
 (707) *Li:bira kanna da huök.*
 Lyybyra where INDF **NEG.EX.3SG**
 'Lyybyra is nowhere.'
 (PoS_PrG_1964_Lyybyra_flk.092)
- LOCATION THEME
 (708) *Bu dojdu-ga aragi: huök.*
 this land-DAT/LOC alcohol **NEG.EX.3SG**
 'In this land, there is no alcohol.'
 (KiPP_2009_Story_nar.KiPP.022)

As for person-number marking, *huök* behaves precisely like its affirmative counterpart *bar*. Example (709) shows a third-person plural theme, and example (710) shows a first-person singular theme. In either case, the existential noun exhibits person-number agreement. As can be additionally seen, the location can be omitted from the clause when not further specified.

THEME

- (709) *Er kihi-ler bagas huōk-tar, [...].*
 man human-PL EMPH NEG.EX-3PL
 'The men are not there, [nobody is there, they went fishing with a net, apparently].'
 (BeAM_199X_LegendSpiritOfTrees_nar.181)
- (710) *Min min bagas bügün olor-o-bun, harsin*
 1SG.PRO 1SG.PRO EMPH today live-PRS-1SG tomorrow
 [THEME]
huōk-pun, [...].
 NEG.EX-1SG
 'I, however, am living today, tomorrow I won't be there, [I though].'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.207)

In the case of negative existential clauses, it can be noticed that the overwhelming majority of them has third-person singular themes. The lack of first- and second-person referents is due to their default givenness in discourse. The small number of third-person plural referents can be explained by the fact that its amount is logically unimportant in the case of the absence of a referent. This, in turn, gives rise to the usage of underspecified number forms, which are homonymous with singular forms (see Section 4.1.1). In example (711), the speaker simply points to the absence of trees in the tundra, not to the lack of either one specific or several specific trees. Semantically, thus, the proposition is identical to constructions like *The tundra is treeless*. However, the number ambiguity can be resolved by using numerals or alike (712).

LOCATION

THEME

- (711) *Manna müōra-ga mas huōk.*
 here tundra-DAT/LOC tree NEG.EX.3SG
 'Here in the tundra, there are no trees.'
 (AsKS_19XX_Amulet_nar.266)

THEME

- (712) *Bir da n'u:čča-hit huōk, [...].*
 one EMPH Russian-AGN NEG.EX.3SG
 'There is not a single speaker of Russian, [no human who would know a Russian word].'
 (BeES_1997_HistoryOfKatyryk_nar.024)

In other tenses and moods than the indicative present, the copula verbs *e-* ~ *er-* and *būōl-*, respectively, occur. Their distribution is the same as in other non-verbal predications; example (713) displays the simple past tense, and example (714) the imperative mood.

- THEME
 (713) *D'ie huōk e-t-e.*
 house NEG.EX be-PST1-3SG
 'There were no houses.'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.026)

- THEME
 (714) [...] *kiliēp da huōk būōl-lun.*
 bread EMPH NEG.EX be-IMP.3SG
 '[We will not die of hunger, however], may there be no bread.'
 (SuON_KuNS_19990303_HardLife_conv.SuON.142)

In negative possessive clauses, caritive adjectives formed with “-(t)A *huōk*” (see Section 12.1) are used. Consequently, negative possessive clauses are structurally negative predicate adjectives.

- POSSESSEE [POSSESSOR]
 (715) *Bir-ken da ogo-to huōk.*
 one-INTS EMPH child-POSS NEG.3SG
 'He has not a single child.'
 (SaSS_1964_NganasanBraveBoy_flk.003)

- POSSESSOR POSSESSEE
 (716) *Bu togo bihigi ogo-to huōk-put=uj?*
 this why 1PL.PRO child-POSS NEG-1PL=Q
 'Why don't we have any children?'
 (ChPK_1970_ThreeBoys_flk.003)

- POSSESSEE
 (717) *E, kihin, d'ie, hira d'ie-te huōk*
 AFF in.winter house sledge house-POSS NEG
 [POSSESSOR]
er-dek-pitine, [...].
 be-TEMP-1PL
 'Yes, in winter, when we did not have a sledge house yet, [...].'
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.083)

Like in the case of affirmative possessive clauses, this pattern is to be classified as adhering to the *companion schema* (Heine 1997: 53–57) and the *with-possessive* (Stassen 2009: 54–55), respectively. Sporadically, the negative existential noun *huōk* can also be used as a copula element, combining the possessor in the dative-locative case with the unmarked possessee that functions as the subject of the clause. The emerging construction is an instance of the *locative/goal schema* (Heine 1997: 50–53, 59–61) and *locational possessives* (Stassen 2009: 48–50), respectively.

- (718) [...] *a Papov-ka pam'atn'ik huōk, Andr'ej*
 and Popov-DAT/LOC monument NEG.EX Andrey
Al'eksandrav'ič'-ka.
 Aleksandrovich-DAT/LOC
 '[And different ones, Nansen, for them a monument was raised], but
 Popov has no monument, Andrey Aleksandrovich.'
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.138)

8.5.2 Constituent Negation

In contrast to clausal negation, constituent negation scopes only over one constituent within a sentence. Therefore, not the entire proposition is negated, but it is not valid for one particular referent. In example (719), it is expressed that some people from Yessey were not rich, but others were. Similarly, in example (720), it becomes clear that the named people fed the speaker, but the food was not good. Consequently, constituent negation relates to focus from a semantic-pragmatic point of view. The negated constituent is of particular interest to the speaker, and it indicates the presence of alternatives (see Section 10.2 for the notion of *focus* and Fălăuș 2020 for a thorough discussion of the interplay of negation and focus).

In Dolgan, constituent negation is expressed with the emphatic and additive particle *da ~ da:*, which stands immediately after the constituent it relates to. Expectedly, the particle has to be accompanied by a negative predicate in the clause since it has no intrinsic negative semantics, forming negative polarity items.

- (719) *D'ehiēj-der-iŋ e:, bari-lar-a da buōl-bat-tar*
 Yessey-PL-POSS.2SG eh all-PL-POSS.3SG EMPH be-NEG.PRS-3PL
baj kihi-ler, baj iāl-lar.
 rich human-PL rich family-PL
 'The people from Yessey, not all of them were rich people, rich families.'
 (MaPX_KuNS_200X_YakutsOfEssej_conv.MaPX.016)

- (720) *Aji-li: da ahap-pat-tar, [...].*
good-SIM EMPH feed-NEG.PRS-3PL
 ‘They do not feed [me] well, [I do not have good clothes, everything is torn].’
 (AkEE_19900810_GirlAnys_flk.022)

As described in Section 3.8, the particle *da ~ da:* expresses emphasis and addition but also forms indefinite pronouns and negative polarity items. The given homonymy of the particle often yields ambiguities, which can only be resolved via the context. In example (719), it is clear that *barilara* ‘all of them’ is merely negated since there were other rich people and the reading ‘*not even all of them*’ is unfelicitous given the universal quantifier used. Still, in many contexts, a *not even*-reading is entirely plausible, too. In example (721), the ambiguity even leads to contradictory readings: Either one did not get to know anything about the named incident (→ not EVEN in the news), or one got to know it, but via a different channel (→ not in the NEWS, but ...). The further context and world knowledge imply that the first reading is correct in the given discourse, but the clause itself does not resolve the ambiguity.

- (721) [...] *ös-kö da huök e-t-e.*
news-DAT/LOC EMPH NEG.EX be-PST1-3SG
 ‘[Earlier one did not hear that people were killed in those settlements], it did not exist (even) in the news.’
 (BeES_1997_HistoryOfKatyryk_nar.152)

In this context, also instances of resumptive quantification shall be mentioned. In this case, two or more referents are listed, for which the proposition of the sentence is not true. Formally, each of the constituents is followed by the particle *da ~ da:*, and the predicate of the clause is negative. Thereby, the negation can be expressed morphologically, but also intrinsically negative forms such as the admonitive mood (see Section 6.5.11) license the negative polarity item, here.

- (722) *Bu kolbuja-ga ili-gin da,*
 this chest-DAT/LOC **hand-POSS.2SG.ACC EMPH**
čömüje-gin da ug-a:ja-gin.
finger-POSS.2SG.ACC EMPH stick-ADM-2SG
 ‘Stick neither your hand, nor your finger into this chest.’
 (AkEE_19900810_PearlBeard_flk.049)

Finally, some variation can be observed if the negated constituent stands outside the clause structure. The particle *da ~ da:* can still occur after its related constituent, like in example (723). However, the relevant constituent can also be negated with the negative existential noun *hūōk*, as in example (724). This pattern might occur because, standing outside the clause structure, it is syntactically impossible for the polarity item to be licensed by the negated predicate. However, it is hard to explain why the structure in (723) is then possible since the relevant constituent likewise stands outside the clause structure. From a descriptive point of view, however, it suffices to say that outside the clause structure, both the particle *da ~ da:* and the negative existential noun *hūōk* can express constituent negation.

- (723) *Kimîe-ke da kepse:-bet e-t-e,*
 who-DAT/LOC INDF tell-NEG.PTCP.PRS AUX-PST1-3SG
ūōl-u-gar da.
 son-POSS.3SG-DAT/LOC EMPH
 'He did not tell [it] to anybody, not even to his son.'
 (AsKS_19XX_Amulet_nar.253)

- (724) *Balig-i-nan hūōk, [...] bu taba-nnan glavnaje*
 fish-EP-INS NEG this reindeer-INS essential.R
emte-n-el-ler.
 heal-REFL-PRS-3PL
 'Not with fish, [...], they heal themselves essentially with reindeer.'
 (ChAPa_NN1_2009_Taboo_nar.ChAPa.090)

Clausal Syntax—Complex Clauses

Complex clauses are understood here as clauses containing more than one predication and one predicate, respectively. Thereby, the notion of *predicate* is to be understood broadly in this context. Non-finite verb forms, which are very important for clause combining in Dolgan, also count as predicates here, although they may even lack person-number indicating morphology. Section 9.1 deals with clause chains, which tend to be grammaticalized for marking of aspect and actionality (see also Section 6.4.9). Section 9.2 deals with coordination, that is, with the combination of two or more independent clauses. Section 9.3 deals with subordination, that is, with complex clauses that depend on each other semantically and in which the dependent clause replaces a constituent within the matrix clause.

9.1 Clause Chaining

Clause chains are complex clauses, which semantically coordinate two or more clauses but are instances of subordination from a syntactic point of view (Longacre 1985: 374–376; Payne 1997: 321–325). Consequently, they describe two or more events, which are independent of each other: In example (725), the events of coming and bringing can sharply be separated from each other. Syntactically, however, the non-finite verb form *kel-en* ‘come-CVB.SEQ’ does not form an independent clause, which could stand alone. Therefore, clause chaining as a mechanism of clause combining stands between coordination and subordination. Consequently, I deal with it separately in this section. As was pointed out by two anonymous reviewers, it is essential to note that clause chains may often look like but are not identical to serial verb constructions in Haspelmath’s (2016: 296) sense. The decisive difference lies in that clause chains contain a linking element, which is absent in serial verb constructions.

In Dolgan, clause chains are formed with the sequential converb -An (725), the simultaneous converb -A ~ -I: (726) and the negative simultaneous converb -BAkka (727).

- (725) *M’il’is’ije-ler kel-en il-pit-ter.*
 police-PL come-CVB.SEQ bring-PST2-3PL
 ‘The policemen came and took [him] away.’
 (ChGS_UoPP_20170724_SocCogOrder_conv.UoPP.034)

- (726) *Aragi: ih-e olor-ol-lor.*
 alcohol **drink-CVB.SIM** sit-PRS-3PL
 'They are sitting and drinking alcohol.'
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.105)
- (727) *Ol ogonn'or i:kte:-bekke ki:r-d-e h-onon,*
 that old.man **pee-NEG.CVB.SIM** enter-PST1-3SG EMPH-so
ûögüle:-bit-i-nen.
 shout-PTCP.PST-EP-INS
 'The old man did not pee and went in immediately, shouting.'
 (PoKK_1964_TwoOrphanBoys_flk.233)

As can be seen in the examples, the choice of the converb determines the meaning of the construction: Clause chains formed with the sequential converb (725) express events that follow each other. Clause chains formed with the affirmative simultaneous converb (726) express events, which occur simultaneously. The negative simultaneous converb (727) appears to be ambiguous concerning the taxis relation, which might be because the latter is somewhat irrelevant in the case of an absent event. Additionally, both simultaneous converbs oscillate between forming clause chains and adverbial modal clauses (see Section 9.3.3.4).

Most prototypically, the first arguments of the verbs included are co-referential, and the verbs stand adjacently in the clause. A particular instance of such clause chains are the grammaticalized postverbal constructions (see Section 6.4.9). Here, the inflected verb in the construction has lost its lexical meaning and is, thus, rather an auxiliary verb expressing aspect or actionality. As was shown by Däbritz (2019b), the disambiguation of clause chains is not always easy. In example (728), the semantics of the verbs included clearly favour an aspectual or actional reading since the concepts of swimming and lying are hardly combinable. But in example (729), either reading is entirely plausible.

- (728) [...] *ebe-ge üs ki:l karb-i:*
 river-DAT/LOC three wild.reindeer **swim-CVB.SIM**
hit-al-lar.
lie.AUX-PRS-3PL
 '[He reached the tents on the other side], there are swimming three
 wild reindeer in the river.'
 (PoKK_1964_TwoOrphanBoys_flk.173)

- (729) *Ö:r kör-ö tur-but ebe-tin*
 long look-CVB.SIM stand(.AUX)-PST2.3SG river-POSS.3SG.GEN
u-tun.
 water-POSS.3SG.ACC
 'For a long time, he was standing and looking at the river's water.' ~
 'For a long time, he was [constantly] looking at the river's water.'
 (PoNA_19910207_Fishing_nar.145)

From a syntactic point of view, postverbal constructions are undoubtedly clause chains since their syntactic patterns do not depend on the degree of lexicalness of the inflected verb in the construction. Syntactically, the examples (725) (clear instance of an inflected lexical verb) and (728) (clear instance of an inflected auxiliary verb) are entirely identical.

A less prototypical but still clear instance of clause chaining are clauses in which the verbs included do not stand adjacently but otherwise adhere to the patterns described above. In example (730), the direct object of *ölör-* 'kill' is placed between the two verbs of the construction, but nevertheless, the verbs do not form independent clauses.

- (730) *Ūol-a tak-an tihi-ni ölör-büt.*
 boy-POSS.3SG go.out-CVB.SEQ female.reindeer-ACC kill-PST2.3SG
 'The boy went out and killed a reindeer cow.'
 (AkEE_19XX_BoySister_flk.059)

When it comes to constructions with not co-referential first arguments of the verbs included, the issue becomes more complex. As described in Sections 6.3.2.1 to 6.3.2.3, all three relevant converbs can principally take person-number endings from set 1 (predicative endings; see Section 6.2). This pattern is possible but unusual if the first arguments of the verbs included are co-referential (731). If these arguments are not co-referential (732), it is, in turn, obligatory.

- (731) *fald'-am-min kel-bit e-ti-m.*
 be.sick-CVB.SEQ-1SG come-PTCP.PST AUX-PST1-1SG
 'I had been sick and had come [to Norilsk].'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.183)

- (732) *Bu d'on-u bari-tin igir-an-nar ogo*
 this people-ACC all-POSS.3SG.ACC call-CVB.SEQ-3PL child
törö:-büüt kurum-a buöl-ar.
 be.born-PTCP.PST celebration-POSS.3SG be-PRS.3SG
 'They invite all people, that's the celebration of the birth of the child.'
 (SuAA_20xx_NameGiving_nar.032)

It is apparent that the syntactic patterns of example (731), and especially of example (732), differ significantly from the patterns observed above. However, I still subsume them under the notion of *clause chaining* for two reasons. On the one hand, these constructions still express the consecutiveness or simultaneity of two events, which do not depend on each other. Therefore, the structure does not qualify for subordination semantically. On the other hand, the verb inflected with the converb suffix cannot independently form a clause, whence the construction is not eligible for coordination either. Hence, though neither optimal, the best solution is to account for the given constructions as clause chains, acknowledging that they are far less prototypical than the construction discussed at the beginning of the section.

Finally, some comments on the role of other converbs (see Sections 6.3.2.4 to 6.3.2.7) are necessary here. Indeed, these converbs occur in similar but not identical domains from a syntactic point of view. Instead, they can always be analyzed as forming adverbial clauses, wherefore they are discussed in Section 9.3.3 subsumed under the notion of *subordination*. However, there is one seeming exception. As described in Section 3.5.2, the verb *gin-* 'make' can express desiderative modality when combined with the purposive converb -A:rI. Here, the meanings of both the purposive converb and the inflected verb *gin-* 'make' are bleached, expressing mere desideration. Formally, both verbs always stand adjacently in the given contexts, and their first arguments are per default co-referential (see also Jark 2018 for details). Therefore, I analyze this construction as a clause chain, not as an instance of purpose clauses.

- (733) *Kirgit-tarin gitta kepset-e:ri gin-ar, [...].*
 girl-POSS.3PLACC with chat-CVB.PURP make-PRS.3SG
 'He wants to talk with the girls, [but none of them speaks].'
 (BaRD_1930_DaughterOfNnganasan_flk.039)

To sum up, one can say that clause chains in Dolgan appear to express the consecution or simultaneity of two or more independent actions or events. In these constructions, only one verb is inflected finitely, the other verb(s) included appearing in a converb form (sequential and simultaneous converb, respect-

ively). Particular instances of clause chains are, on the one hand, postverbal constructions, in which the inflected verb loses its lexical meaning, and, on the other hand, the desiderative construction formed with purposive converb and the verb *gin*- ‘make’.

9.2 Coordination

Coordination means the combination of two clauses bearing the same grammatical status (Payne 1997: 336). Thus, the combined clauses do not depend on each other syntactically, as in the case of subordination. In contrast to clause chains, coordinated clauses can syntactically be separated from each other, being grammatical clauses on their own. In Dolgan, there are two coordination strategies: Juxtaposition and the use of coordinating conjunctions.

The most common strategy to coordinate two or more clauses in Dolgan is juxtaposition. Thereby, the given clauses are simply placed one after another, with an intonational break between them. Examples (734) and (735) display two instances of juxtaposition, whereby the former is logically conjunctive (both/all propositions are true), and the latter is logically disjunctive (one of the propositions is true). The disjunction in example (735) is expressed by the double use of the interrogative particle *du̯* ~ *du*:. Formally, disjunctive coordination is, thus, juxtaposition of polar questions (see Section 8.4.2.1).

- (734) *Biek hild'-ar, ogo-tun hirit-innar-a:čči,*
 always go-PRS.3SG child-POSS.3SG.ACC walk-CAUS-HAB.3SG
d'ie-biti-ger kōmölöh-ö:čči, üčügej bagaji-dik
 house-POSS.1PL-DAT/LOC help-HAB.3SG good very-ADVZ
olor-o-but ani.
 live-PRS-1PL now
 ‘He always goes, takes the child for a walk, helps at home, we are living very well now.’
 (UoPP_ChGS_20170724_SocCogRetell2_nar.UoPP.031)

- (735) *Bar du, huök du.*
 EX Q NEG.EX Q
 ‘There is [storytelling], or there is not.’
 (ElBK_KuNS_2004_Storytellers_conv.ElBK.090)

Besides juxtaposition, Dolgan also uses conjunctions to coordinate clauses. Two items, *onton* ‘and; then’ (736) as well as *uōnna* ‘and’ (737), are clearly of

Turkic origin, whereby the latter is used very rarely in spontaneous Dolgan speech. Instead, it appears in written texts, which were edited by people who have a good command of Sakha. Given that *uōnna* ‘and’ is frequent in Sakha (Stapert 2013: 274–275), its appearance in the named contexts seems to be caused by Sakha interference.

- (736) *Onon ülele:-bit-e, onton strait'el' buōl-a:čči hajin.*
 so work-PST2-3SG **then** builder be-HAB.3SG in.summer
 ‘So he worked, and he was a builder in summer.’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.052)
- (737) *Gini kel-bit Isus att-i-gar*
 3SG.PRO come-PST2.3SG Jesus place.beneath-POSS.3SG-DAT/LOC
uōnna¹ diē-bit: [...].
and say-PST2.3SG
 ‘He came to Jesus and said: [“Be happy, teacher”, he said and kissed him].’
 (PoNA_19940110_JesusIsArrested_transl.017–018)

A very frequently occurring conjunction in Dolgan is *da* ‘and’. It is hard to judge whether this item rather corresponds to the inherited emphatic particle *da: ~ da*, which, among other things, forms indefinite pronouns, or whether it is borrowed from Russian *da* ‘and’. In any case, its functional properties correspond to the Russian conjunction.

- (738) *Tojus bir kihi-ni ku:s-put da üñkül-ü:*
 Ewenki one human-ACC embrace-PST2.3SG **and** dance-CVB.SIM
hild'i-bit-tar.
 go.AUX-PST2-3PL
 ‘The Ewenki embraced one human, and they were dancing.’
 (ChPK_1970_Nganasan_flk.040)

Finally, the conjunctions *i* ‘and’, *a* ‘and; but’, *no* ‘but’ and *il'i* ‘or’, which are all borrowed from Russian, occur in Dolgan speech. Thereby, *i* ‘and’ expresses conjunctive coordination (739), *a* ‘and; but’ expresses conjunctive coordination with a slight adversative connotation (740), *no* ‘but’ expresses adversative coordination (741), and *il'i* ‘or’ expresses disjunction (742).

1 In the INEL Dolgan Corpus, *onno* ‘there; then’ was chosen as transcription instead of *uōnna* ‘and’. The corresponding audio file, however, clearly reveals the latter variant.

- (739) *I or-u:gun i kolbasa buōl-ar.*
and take.out-PRS-2SG **and** sausage become-PRS.3SG
 ‘And you take it out, and it becomes sausage.’
 (AnIM_2009_Sausage_nar.011)
- (740) *Ulakan ki:h-im agis d'il-la:k e-t-e, a*
 big daughter-POSS.1SG eight year-PROPR be-PST1-3SG **and**
küččügüj ki:h-im alta d'il-la:k e-t-e.
 small daughter-POSS.1SG six year-PROPR be-PST1-3SG
 ‘My big daughter was eight years old, and my small daughter was six years old.’
 (PoPD_KuNS_2004_Life_conv.PoPD.082)
- (741) *Īj-bit bosküōj bagaji no kap-karaŋa.*
 moon-POSS.1PL beautiful very **but** INTS-black
 ‘The moon is very beautiful, but [it is] pitch black.’
 (PoTY_2009_Aku_nar.090)
- (742) [...] *ölöt-tö:-büt-e, bihila:k, ili ati:la:-bit-a, bihila:k,*
 kill-MULT-PST2-3SG apparently **or** sell-PST2-3SG apparently
horok horok-tor-un iti.
 some some-PL-POSS.3SG.ACC that
 ‘[I don’t know, our reindeer, I don’t know what he was doing when having wounded them], he killed or sold them probably, some.’
 (SuON_KuNS_19990303_HardLife_conv.SuON.249)

9.3 Subordination

Subordination means that two (or more) clauses are combined, whereby one clause is dependent on the other (Payne 1997: 336). More technically speaking, the dependent subordinate clause replaces a constituent within the matrix clause. Subordinate clauses are commonly divided into three groups: Complement clauses, which replace the subject or the object in the matrix clause; relative clauses, which replace an attribute in the matrix clause; adverbial clauses, which replace an adverbial in the matrix clause. As said above, they have in common that they depend on the matrix clause. Still, otherwise, their formal and functional properties differ significantly (Payne 1997: 336–337), whence it seems reasonable to discuss them separately in what follows.

9.3.1 Complement Clauses

Complement clauses replace one of the matrix clause's main participants, i.e. the subject or the object. Thus, they are integrated into the matrix clause's structure and depend on it.

Subject complement clauses are very rare in natural Dolgan speech. If they appear, they are formed by a participle, to which possessive suffixes (see Sections 4.3.1 and 6.2) are attached to establish person-number reference within the subordinate clause. The participle and, if overtly expressed, the subject within the subordinate clause stand in the nominative case. The choice of the participle relates the subordinate clause temporally to the matrix clause: If a present participle (-Ar ~ I:r affirmative, and -BAT negative) is chosen, the event depicted in the subordinate clause is simultaneous to the event in the matrix clause. If a postterminal past participle (-BIT affirmative, and -BAAtAK negative) is chosen, the former event precedes the latter event. If the future participle (-IAK) is chosen, the event expressed in the subordinate clause is expected to happen after the event described in the matrix clause.

In example (743), the clause [*hahil külere*] functions as the subject of the matrix clause and agrees in person and number with the middle verb *ihilin-*, which is the predicate of the clause. Within the subordinate clause, *hahil* 'fox' is the subject, which is, in turn, cross-referred by the third-person singular possessive suffix at *külere* 'its laughter'. Example (744) generally exhibits the same structure, except the choice of the participle and the appearance of a direct object in the complement clause.

- (743) *Araj onno ulaga:ga [hahil kül-er-e]*
 suddenly there corner-DAT/LOC fox laugh-PTCP.PRS-POSS.3SG
ihilin-n-e.
 be.heard-PST1-3SG
 'Suddenly, it was heard in the corner that a fox laughed.'
 (FeA_1931_OldManUkukuutFox_flk.046)

- (744) [*Bihigi an'ï-lar-i oyor-bup-put*] *ulakan-nik*
 1SG.PRO sin-PL-ACC make-PTCP.PST-POSS.1PL big-ADVZ
batt-i:r e-bit gini-ni.
 pull.down-PTCP.PRS AUX-PST2.3SG 3SG.PRO-ACC
 'It afflicted him apparently a lot that we had committed sins.'
 (PoNA_19940110_MountOfOlives_transl.009)

Object complement clauses are much more frequent in Dolgan speech. In contrast to subject complement clauses, they do not replace the subject in the mat-

rix clause but the object. Object complement clauses are principally formed like subject complement clauses, the crucial difference being that the participle forming the subordinate clause exhibits accusative case marking (745). If there is an overtly expressed subject in the subordinate clause, it usually displays no case marking (746). In a few cases, it also exhibits accusative case marking (747).

- (745) *Oruô tuôlkula:-t-a* [toŋ-or-un].
 Oruo understand-PST1-3SG freeze-PTCP.PRS-POSS.3SG.ACC
 ‘Oruo understood that he was about to freeze to death.’
 (AsKS_19XX_Amulet_nar.178)

- (746) [*Ulakan mije: heti:-ler tur-al-larin*]
 big very sledge-PL stand-PTCP.PRS-POSS.3PL.ACC
kör-büt.
 see-PST2.3SG
 ‘He saw very big sledges standing there.’
 (BaRD_1930_HairyPeople_flk.010)

- (747) *Ol ihin kim da:gani [ani seri:-gin*
 that because.of who EMPH now war-POSS.2SG.ACC
büôl-üôg-un] *bagar-bat.*
 become-PTCP.FUT-POSS.3SG.ACC want-NEG.PRS.3SG
 ‘Therefore, nobody wants now that war would come.’
 (MiXS_1967_SoldierInSecondWorldWar_nar.077)

As can be seen from the examples, various participles form object complement clauses. The choice of the participle depends on the polarity of the subordinate clause (affirmative vs negative) and the temporal reference with respect to the matrix clause (present vs past vs future). Since there is no negative future participle, a special construction is applied if the subordinate clause is negative, and a future time reference shall be established. In this case, the affirmative future participle (-IAK) is combined with the negative existential noun *hüôk*, whereby a relevant possessive suffix and the accusative case suffix is attached to the latter.

- (748) *Öl-üô hüôg-un bil-l-e!*
 die-PTCP.FUT NEG.EX-POSS.3SG.ACC know-PST1-3SG
 ‘He understood that he would not die!’
 (AsKS_19XX_Amulet_nar.185)

Usually, there is no conjunction commencing the complement clause. In the case of object complement clauses, however, interrogative pronouns occur relatively frequently within the subordinate clauses. Nevertheless, they do not function merely as a complementizer but also contribute to its semantic content.

- (749) *A man-ti-ŋ keps-i:r kajdak*
 and this-POSS.3SG-POSS.2SG tell-PRS.3SG **how**
kirba:-bit-in.
thrash-PTCP.PST-POSS.3SG.ACC
 ‘And she tells how he has thrashed [her].’
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.088)

Finally, two constructions expressing deontic modality (necessitative mood 2, see Section 6.5.7.2) have to be discussed in this context. The necessitative mood 2 has two forms, one personal and one impersonal. In the former case, the particle *na:da* ‘need to; necessary’ (from Russian *nado* ‘id.’) is combined with the accusative case form of the future participle and a relevant possessive suffix. In the latter case, it is the dative-locative case form of the future participle. From a syntactic point of view, the personal structure can be analyzed as follows: The particle *na:da* is the predicate of the matrix clause, and the future participle is the predicate of the subordinate clause. Its accusative case morphology points to analyzing it as an object complement clause (750). Given the functional similarity of the personal and impersonal form, this analysis probably holds for the impersonal form as well, although accusative case-marking is surely missing here (751).

- (750) *Kepset-îek-kitin na:da, birge*
 talk-PTCP.FUT-POSS.2PL.ACC need.to together
olor-ûok-kutun na:da.
 live-PTCP.FUT-POSS.2PL.ACC need.to
 ‘You have to talk, you have to live together.’
 (SuON_KuNS_19990303_HardLife_conv.KuNS.041)

- (751) [...] *o-nu körd-ü: bar-îak-ka na:da.*
 that-ACC search-CVB.SIM **go-PTCP.FUT-DAT/LOC** need.to
 ‘[The czar has a single daughter, they said], one needs to go to search her.’
 (PoXN_19701118_Chopochuka_flk.065)

9.3.2 *Relative Clauses*

As described above, relative clauses replace a nominal modifier within the matrix clause (Payne 1997: 325–326), i.e. they can be expected to behave similarly to adjectives, demonstratives or numerals from a syntactic point of view, forming heavy noun phrases (see Section 7.1). Most frequently, relative clauses are formed with participles in Dolgan. Thereby, the present and postterminal past participles (see Sections 6.3.1.1 to 6.3.1.4) appear most often, but also the future participle (6.3.1.5), the habitual participle (6.3.1.6) and the abessive participle (6.3.1.8) are used. The conditional participle (6.3.1.7), in turn, does not form relative clauses. Examples (752) to (754) show instances of relative clauses. Like other nominal modifiers, the participle forming the relative clause does not agree with its head noun, and the relative clause precedes its head noun.

- (752) [...] [*n'wčča da til-in bil-er*] *kihi*.
 Russian EMPH word-POSS.3SG.ACC know-PTCP.PRS human
 'There were no speakers of Russian], no human who knows a Russian word.'
 (BeES_1997_HistoryOfKatyryk_nar.024)

- (753) *Dogot-tor, [majdi kajj-ga bīrag-a:čči]*
 friend-PL not.long.ago prison-DAT/LOC throw-PTCP.HAB
kihi-gitin kōr-ūy d'e, [...].
 human-POSS.2PLACC see-IMP.2PL well
 'Friends, look after the human you threw into prison recently, [what kind of human we are torturing there].'
 (PoXN_19701118_Chopochuka_flk.105)

- (754) *Horok pastu:k bu [tōr-ū:lik] taba-ni*
 some shepherd this give.birth-PTCP.ABE reindeer-ACC
ill-er.
 take.away-PRS.3SG
 'Some shepherds bring away the reindeer, which have not calved yet.'
 (KiMN_1975_ReindeerHerdin_nar.038)

As can be seen from the examples, all kinds of verbs can appear in relative clauses, regardless of their valence. If a relative clause is formed from an intransitive verb, the relativized noun prototypically corresponds to the single argument of the verb. Thereby, there is no restriction concerning the semantic valence of the verb; both agent and patient roles can be relativized. In other terms, both unaccusative (755) and unergative (756) verbs can appear in rel-

- (758) [*N'wčča d'ie-ler-i oŋor-or*] *us-tar holo-to*
 Russian house-PL-ACC make-PTCP.PRS master-PL free.time-POSS
hūōk-tar.
 NEG-3PL
 'The masters who are building Russian houses have no free time.'
 (PoNA_19910207_Fishing_nar.008)
- (759) *Abachi n'em'is [tün da oŋor-but]*
 evil.spirit German at.night and make-PTCP.PST
mosti-lar-bitin tur-uōr-bat e-t-e.
 bridge.PL.R-PL-POSS.1PL.ACC stand-CAUS-PTCP.NEG AUX-PST1-3SG
 'The bloody German also didn't let the bridges stand, which we had
 built by night.'
 (MiXS_1967_SoldierInSecondWorldWar_nar.053)

In clauses like in example (759), the matrix and relative clause subjects are, thus, not co-referential. If this is the case, the subject of the relative clause behaves syntactically like a possessor in adnominal possession (see Section 7.1.2.3). This means that it can be realized either overtly as a lexical noun or personal pronoun in combination with the relevant possessive suffix at the head noun (760), or, if it is pronominal, solely via the applicable possessive suffix at the head noun ((759) above).

- (760) [...] *töttörü hü:r-e-bin [dogot-tor-um bar-bit]*
 back run-PRS-1SG friend-PL-POSS.1SG go-PTCP.PST
hir-derin diēk.
 place-POSS.3PL.ACC to
 '[They are saying something, they are chatting], I run back to the place
 where my friends have gone.'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.042)

Besides participles, also the existential nouns *bar* and *hūōk* can function as relativizers in Dolgan. The usage of *bar* and *hūōk* in this domain ((761) and (762)) is restricted to the relativization of referents playing the semantic roles *theme* and *locus ~ location*. In the former case, the relative clause can functionally be analyzed as a locative clause; in the latter case, it is functionally an existential clause. Since locative and existential clauses—in the present tense—are formed with the existential nouns *bar* and *hūōk* (see Section 8.2.3), the parallel is apparent. However, from a syntactic point of view, this type of relative clause has to be distinguished from the kind discussed above, since

neither *bar* nor *huōk* is a modifying adjective, but a modifying noun. Given that modifying nouns in Dolgan not necessarily call for the realization of a third-person possessive suffix at their head noun, the behaviour of the existential nouns *bar* and *huōk* is completely in line with the patterns described in Section 7.1.2.3.

- (761) *Kupîēs kuōrat-i-gar bar kihi, [...]*.
 merchant town-POSS.3SG-DAT/LOC EX human
 ‘The human, who was in the merchant’s town, [ran to the merchant’s house].’
 (KiMN_19900417_Milkmaid_flk.126)
- (762) [...] *bu agabit huōk hir-i-ger.*
 this clergyman NEG.EX place-POSS.3SG-DAT/LOC
 ‘[Baptizing, far away in the tundra], at a place where there is no clergyman.’
 (SuAA_20XX_NameGiving_nar.005)

Finally, relative clauses are formed only seldom with interrogative pronouns in Dolgan. In this case, the interrogative pronouns function as relativizers and, thus, can fulfil any syntactic function within the relative clause. This pattern is unequivocally taken over from Russian and occurs much more frequently in recent texts from fully bilingual speakers and in written Dolgan. Additionally, relative clauses formed with an interrogative pronoun often do not precede the relativized noun but follow it.

- (763) *Bagar, pal’arnij stancija kör-ūōk-tere, [kanna ba:l-lar*
 maybe polar station see-FUT-3PL where EX-3PL
v’ezd’exot-tar, rad’io.]
 all.terrain.vehicle-PL radio
 ‘Maybe they will see it at the polar station, where there are all-terrain vehicles and radio.’
 (AsKS_19XX_Amulet_nar.295)

9.3.3 Adverbial Clauses

As stated above, adverbial clauses replace an adverbial within the matrix clause. In Dolgan, adverbial clauses are formed with converbs and participles, showing much variation. In many cases—especially in the case of temporal clauses—distinguishing adverbial clauses from clause chains (see Section 9.1) is complex, if possible at all. Here, as a matter of choice, many complex clauses,

including the sequential and simultaneous converbs, are subsumed under the notion of *clause chain*. In contrast, other converbal constructions are subsumed under the notion of *adverbial clause*. Despite the manifold readings of adverbial clauses, they behave similarly concerning issues of co-reference and person-number marking of the subject in the adverbial clause. The matrix and adverbial clauses' subjects can be co-referential but need not. If they are not co-referential, person-number reference of the subject in the adverbial clause is expressed as follows: The predicative endings (set 1; see Section 6.2) attach to converbs, and the possessive suffixes (set 2; see Sections 4.3.1 and 6.2) attach to participles.

Finally, it has to be mentioned that in more recent texts also the subordinating conjunctions *patamušta* 'because', *štoḃi* 'so that, in order to', *kagda* 'when' and *jesl'i* 'if' do occur. They are loans from Russian, and they are always followed by a finite predicate, which completely mirrors the Russian pattern. Therefore, these constructions are not discussed further here but must undoubtedly be acknowledged when discussing adverbial clauses in contemporary Dolgan. From a semantic point of view, adverbial clauses can be divided into several classes, which will be discussed separately in what follows.

9.3.3.1 Temporal Clauses

Temporal clauses express a temporal relationship of two events. Thereby, the event described in the temporal clause can precede (anteriority), be simultaneous (simultaneity) to or can succeed (posteriority) the event in the matrix clause.

Temporal clauses expressing anteriority are formed with the postterminal past participle -BIT, the anterior converb -A:t and the sequential converb -An in combination with the postposition *baran* ~ *bara:n* 'after'. The postterminal past participle stands either in its possessive dative-locative case form (764), or the postposition *kenne* ~ *genne* 'after' occurs after the possessive genitive case form of the participle (765). The absolute temporal reference of the construction depends on the matrix clause.

- (764) [Ol *kɪ:n-e* *tüs-püt-ü-ger* *dūō*] ol
 that navel-POSS.3SG fall-PTCP.PST-POSS.3SG-DAT/LOC MOD that
ogo-nu *dūō* *hürekt-i:l-ler*.
 child-ACC MOD baptize-PRS-3PL
 'When the navel has fallen, the child is baptized.'
 (SuAA_20XX_NameGiving_nar.003)

- (765) *Onton*, [*aga-m* *öl-büt-ün* *kenne*] [...]
 then father-POSS.1SG die-PTCP.PST-POSS.3SG.GEN after
d'e kolkhoz-ka *ülele:-bit-im*.
 well kolkhoz-DAT/LOC work-PST2-1SG
 'Then, after my father had died, [because my mother said "don't learn",
 I came home] and worked at the kolkhoz.'
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.014)

However, it has to be noticed that the expression of anteriority and simultaneity in the former construction is sometimes interwoven with the internal event structure of the temporal clause. In example (764), the transformative verb *tüs-* 'fall' occurs, and it is clear that the succeeding event happens after the completion of the former. But in the following example (766), the non-transformative verb *hirden-* 'settle' occurs, and the processes of the Russian settlement and the emergence of smallpox are simultaneous, whereby the former indeed is a prerequisite for the latter.

- (766) [*N'wčča hirdem-mit-i-ger*] *L'ena-ga*
 Russian settle-PTCP.PST-POSS.3SG-DAT/LOC Lena-DAT/LOC
epi'd'e:m'ije-ler buöl-but-tara.
 epidemic-PL become-PST2-3PL
 'When the Russians settled, epidemics came up at the [river] Lena:
 [smallpox, plague, anthrax they are named, the people, dysentery].'
 (MaPX_KuNS_200X_YakutsOfEssej_conv.MaPX.004)

Anterior temporal clauses formed with the anterior converb -A:t are more seldom and much more frequent in Upper Dolgan than in Lower Dolgan. The anterior converb can express the person and number of the subject in the temporal clause (767) but more often occurs in its base form (768). In the latter case, the subjects in the temporal and matrix clauses are always co-referential.

- (767) [*Kömüöl a:h-at-in*] *ebe u-ta* *türgen-nik*
 grease.ice pass-CVB.ANT-3SG river water-POSS.3SG fast-ADVZ
uöl-ar.
 dry.out-PRS.3SG
 'When the grease ice has passed, the water of the river dries out quickly.'
 (PoNA_19910207_Fishing_nar.125)

- (768) [*Taks-a:t*] *uōl-hordoy ile uōl buōl-but*.
 go.out-CVB.ANT boy-pike real boy become-PST2.3SG
 ‘Having gone out, the pike boy became a real boy.’
 (AkEE_19XX_BoySister_flk.178)

Anterior temporal clauses, formed by the sequential converb -An and the postposition *baran* ~ *bara:n* ‘after’, are diachronically close to clause chains since the postposition itself is the lexicalized sequential converb form of the auxiliary verb *bar-* ‘go’. However, from a synchronic perspective, such clauses must be analyzed as proper subordinate clauses, not as clause chains, since the events displayed do not necessarily form a sequence.

- (769) *D'e, [halda:t-i büt-en baran] üörem-mit-tere*.
 well soldier-ACC stop-CVB.SEQ after learn-PST2-3PL
 ‘Yes, after they had finished military service, they studied.’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.156)

Temporal clauses expressing simultaneity are formed by various means. First, the conditional-temporal mood can be used in the temporal clause. As already said in Section 6.5.2, this form traces back to the conditional participle -TAK diachronically. Still, it is more felicitous to analyze it as a finite mood form from a synchronic point of view. The temporal reference of the temporal clause depends on the temporal reference of the matrix clause. If the matrix clause refers, e.g. to the past, like in example (770), the temporal clause refers to the past, too. These clauses are often ambiguous whether they express a temporal or conditional relationship between the two events depicted.

- (770) *Oččogo tuōk iriā-lar-in ill-i:r e-ti-η*
 then what song-PL-POSS.3SG.ACC sing-PTCP.PRS AUX-PST1-2SG
 [*küččügüj er-dek-kinen*]?
 small be-TEMP-2SG
 ‘What kind of songs did you sing when you were small?’
 (ZhNA_KuNS_20XX_LifeAndMusic_conv.KuNS.005)

In addition, there are two strategies for forming simultaneous temporal clauses with the present participle -Ar ~ -I:r. Either the relevant possessive suffix and the dative-locative case suffix are attached to the participle (771), or the postpositions *gitta* ~ *kitta* ‘with’ (772) or *hagina* ‘when’ (773) follow the participle. As described in Section 3.7, the postposition *gitta* ~ *kitta* ‘with’ governs the accusative case, whereas the postposition *hagina* ‘when’ governs the genitive case

of possessive forms. In either case, the temporal reference of the clause again depends on the temporal reference within the matrix clause.

- (771) [...] [*mîn* *hayardî: körs-ör-bö-r*], *gini*
 1SG.PRO first meet-PTCP.PRS-POSS.1SG-DAT/LOC 3SG.PRO
ülele:čči e-t-e okrunüô-ga, [...] *gini*
 work-PTCP.HAB AUX-PST1-3SG OkrONO-DAT/LOC
 ‘[And he was working then], when I met him the first time, he worked
 in OkrONO,² [he was inspector of OkrONO].’
 (PoNA_AkPG_1994_MPXarlampiev_nar.PoNA.009)

- (772) [*Kîr-el-lerin* *gitta*] *batih-an*
 go.in-PTCP.PRS-POSS.3PL.ACC with follow-CVB.SEQ
kîr-bit.
 go.in-PST2.3SG
 ‘When they went in, he followed them inside.’
 (BeAM_199X_HumanInLandOfDeath_flk.040)

- (773) [*Kar ir-er-in* *hagina*] *ücügej-dik*
 snow melt-PTCP.PRS-POSS.3SG.GEN when good-ADVZ
hir-derin kör-üök-terin na:da.
 place-POSS.3PL.ACC see-PTCP.FUT-POSS.3PL.ACC need.to
 ‘When the snow is melting, they have to watch the surrounding well.’
 (KiMN_1975_ReindeerHerding_nar.053)

Finally, temporal clauses expressing posteriority are formed by the future participle -IAK, to which the relevant possessive suffix and the dative-locative case suffix are added. Additionally, the verb form is followed by the postposition *dîeri* ‘until’. Posterior temporal clauses often have a future reference (774), but in the case of a matrix clause referring to the past, the temporal clause refers to the past, too (775).

- (774) [*In’e-git*, *aga-git*
 mother-POSS.2PL father-POSS.2PL
kel-îek-teri-ger dîeri] *gü:le-gitin*
 come-PTCP.FUT-POSS.3PL-DAT/LOC until entryway-POSS.2PL.ACC
gitta d’îe-git ihin ücügej-dik karaj-îj.
 with house-POSS.2PL for good-ADVZ care.about-IMP.2PL

2 OkrONO is an acronym and stands for Russian *okružnoj otдел narodnogo obrazovanija*, i.e. ‘department of national education of the okrug’.

‘Take care of your entryway and your house well until your mother and your father will return.’

(PoNA_2004_MikaMukulajAloneAtHome_nar.068)

- (775) [...] [*uōn biēs d'il-lan-iāk-pa-r* *dīeri*],
 ten five year-VBZ-PTCP.FUT-POSS.1SG-DAT/LOC until
pastuk-tan-ni-m uōn ikki-bi-tten.
 shepherd-VBZ-PST1-1SG ten two-POSS.1SG-ABL
 ‘[Then, after I had grown up, I was a shepherd for two years], I was a shepherd until I turned fifteen, since [the age of] twelve.’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.008)

9.3.3.2 Conditional Clauses

The formation of conditional clauses in Dolgan is as manifold as the formation of temporal clauses. Generally, it can be said that their construction is based on the conditional participle -TAK and the various moods expressing epistemic modality (see Sections 6.5.2 to 6.5.5). Implicative conditionals are formed either with the conditional participle in the dative-locative case (776) or with the conditional-temporal mood (777). In either case, the speaker does not refer to a concrete event but makes a general statement. From a formal point of view, the dative-locative form of the conditional participle only occurs when the subjects in the matrix and conditional clauses are co-referential, like in example (776). As for epistemic modality, the speaker evaluates a relevant event as entirely possible, the conditionals, thus, being factual. The tense-aspect form of the verb in the matrix clause is not predefined, but the present tense and habitual forms are most frequent.

- (776) *MRS, iti buōl-ar, [haka-li: et-tek-ke],*
 MRS that be-PRS.3SG Dolgan-SIM speak-PTCP.COND-DAT/LOC
balik-čit matuōr-da:k stancija-tin, [...].
 fish-AGN engine-PROPR station-POSS.3SG.ACC
 ‘MRS, that is, saying it in Dolgan, the station of the fishermen with a motorboat, [where the people from the rayon, who know about fish, are working].’
 (PoNA_19910207_Fishing_nar.069)

- (777) *Onton [iāld'it-tar kel-lek-terine], aragi-nnan*
 then guest-PL come-COND-3PL alcohol-INS
ih-er-d-e-bit.
 drink-CAUS-CAUS-PRS-1PL

'Then, when guests are coming, we give them alcohol to drink.'
(KiPP_2009_Story_nar.KiPP.009)

Predictive conditionals are formed using two different modal forms in the conditional clause: the conditional-temporal mood -TAK (778) and, much more seldom, the conditional mood -TAr (779). Thereby, the speaker refers to a concrete event, whose accomplishment he evaluates as possible. The matrix clause establishes the temporal reference, mostly future tense (or present tense referring to the future).

(778) [*Bîr-be-tek-kine*] *bir da balig-i il-iâ-ŋ huôg-a.*
give-NEG-COND-2SG one EMPH fish-ACC take-FUT-2SG NEG-3SG
'If you don't give [your daughter], you won't catch a single fish anymore.'
(AkEE_19900810_PearlBeard_flk.015)

(779) [*Haka hir-e ka:l-lar-a*] *kuhagan, [...]*.
Dolgan earth-POSS.3SG stay-COND-3SG bad
'If the Dolgan land stays behind, it is bad, [one has to build up the Dolgan land].'
(KiPP_KuNS_200211_LifeChildren_conv.KiPP.184)

Counterfactual conditionals, finally, are formed by the combination of different epistemic mood forms. In the matrix clause, the counterfactual mood (see Section 6.5.5) always appears. In the conditional clause, either the conditional mood -TAr of the main verb (780) or a participle form of the main verb and the auxiliary conditional form *bûôllar* (781) occur. In either case, the speaker evaluates the event as unreal and factually wrong. Consequently, the temporal reference is mainly to the past since the matrix clause often states that a given event has happened or not.

(780) [*Hajin bûôl-lar*], [...] *hir bari-ta ubaj-iâk*
summer be-COND.3SG earth all-POSS.3SG flame.up-PTCP.FUT
e-t-e.
AUX-PST1-3SG
'If it had been summer, [it would have been over, there would have been a fire], the whole earth would have burnt.'
(BeAM_199X_LegendSpiritOfTrees_nar.194)

- (781) [...] [*er-ge* *taksi-bit* *e-bit-im*
 husband-DAT/LOC go.out-PTCP.PST AUX-PST2-1SG
būōl-lar], *u:* *bah-a* *erejden-e*
 AUX-COND.3SG water scoop-CVB.SIM get.tired-CVB.SIM
hild'-îāk *e-ti-m?*
 go.AUX-PTCP.FUT AUX-PST1-1SG
 'That's all because of my father], if I had married, would I get tired
 scooping water?'
 (BeVP_1970_Laajku_flk.052)

9.3.3.3 Purpose Clauses

Purpose clauses express a purpose or a goal, to the achievement of which the event described in the matrix clause is happening. Purpose clauses are formed by various means in Dolgan, two being equally frequent: Either the purposive converb -A:rI or the possessive accusative form of the future participle -IAK is used. If the former applies, person-number suffixes can be attached to the converb. This structure is generally seldom but obligatory if the subjects in the purpose and matrix clauses are not co-referential (782). If they are co-referential, person-number marking is facultative ((783) and (784)).

- (782) *D'îe-te:gi-ler-e* [*iti:-ge* *pastuk-tar*
 house-ADJZ-PL-POSS.3SG heat-DAT/LOC shepherd-PL
ket-i: *bar-a:ri-lar*] *hayar-îāk*
 guard-CVB.SIM go-CVB.PURP-3PL say-PTCP.FUT
tus-ta:k-tar: [...]
 fall.AUX-NEC-3PL
 'The inhabitants, for that the shepherds will go in the heat, have to say:
 ["Well, when the heat comes, be careful and sleep."]'
 (KiMN_1975_ReindeerHerding_nar.105)

- (783) [...] *on-tu-bun* [*beje-be-r*
 that-POSS.3SG-POSS.1SG.ACC self-POSS.1SG-DAT/LOC
ülele-t-e:ri-bin] *tîā-ga* *tut-a-bin.*
 work-CAUS-CVB.PURP-1SG tundra-DAT/LOC hold-PRS-1SG
 'Having become old myself], I keep [her] in the tundra, for that I can
 make her work for me myself.'
 (UkET_AkEE_19940424_SongsTales_conv.UkET.014)

- (784) *Ta:l eme:ksin per:ne-tin [kur-d-a:ri]*
 Taal old.woman feather.bed-POSS.3SG.ACC get.dry-CAUS-CVB.PURP
arajas-ka u:r-but.
 storage-DAT/LOC lay-PST2.3SG
 'The old woman Taal hung her feather bed on the storage to dry it.'
 (PrG_1964_OldWomanTaal_flk.004)

If the future participle -IAK is used to form a purpose clause, the subjects in both clauses are almost always not co-referential. Therefore, the person and number of the subject in the purpose clause is expressed by the relevant possessive suffix at the future participle.

- (785) *Egel-iŋ miê-ke ûôt bolop-pun*
 bring-IMP.2PL 1SG.PRO-DAT/LOC fire sword-POSS.1SG.ACC
 [*bah-i bih-a oks-ûôk-pun*].
 head-ACC cut-CVB.SIM beat-PTCP.FUT-POSS.1SG.ACC
 'Bring me my fire sword for that I cut [his] head off!'
 (BaRD_1930_DaughterOfUrungAjyy_flk.019)

Finally, the simultaneous converb -A ~ -I: can also be used to express purpose clauses. In this case, the subjects of the purpose and matrix clauses are always co-referential, and the simultaneous converb lacks person-number marking.

- (786) *Birde kara:b-i-nan ira:kta:gi-lara [ôlbüge komuj-a]*
 once ship-POSS.3SG-INS czar-POSS.3PL tax gather-CVB.SIM
kel-er.
 come-PRS.3SG
 'Once their czar comes on his ship to gather taxes.'
 (BaA_1930_OneEyedGirl_flk.028)

9.3.3.4 Modal Clauses

Modal clauses express events that happen concomitantly to the event described in the matrix clause. Thereby, the modal clause modifies the latter event and specifies it further. From both a semantic and a formal perspective, the borderline between modal clauses, temporal clauses and clause chains expressing simultaneity is often fuzzy. In example (787), the main event is the old man's jumping, further modified by the information that he was simultaneously beating the shaman's drum. Hence, both a temporal and a modal relationship is expressed here.

- (787) [Bu *düñür-ün* *oks-o-oks-o*] *d'e*
 this shaman.drum-POSS.3SG.ACC beat-CVB.SIM-beat-CVB.SIM well
ekkiire:-t-e.
 jump-PST1-3SG
 '[The old man] jumped beating the shaman's drum.'
 (FeA_1931_OldManUkukuutFox_flk.043)

In what follows, such admittedly frequent borderline cases, mainly formed with the simultaneous converbs -A ~ -I: (affirmative) and -BAkkA (negative), are not discussed further since their syntax completely adheres to the patterns of clause chains (see Section 9.1).

Clear instances of modal clauses are formed with the modal converb -BIččA (see Section 6.3.2.5; (788)) and the negative converb -m(I)nA ~ -mIn'A ~ -mIjA (see Section 6.3.2.7; (789)). In either case, the subjects in the modal and matrix clauses are necessarily co-referential since neither converb can take person-number endings.

- (788) *Ūol* [*hohuj-bučča*] *tur-a* *ekkiire:-n* *baran*
 boy **startle-CVB.MOD** stand.up-CVB.SIM jump-CVB.SEQ after
taba köliuj-s-e *hild'i-bit-a*.
 reindeer harness-ASST-CVB.SIM go.AUX-PST2-3SG
 'The boy jumped up out of fear and helped to harness the reindeer.'
 (PoKK_1964_TwoOrphanBoys_flk.093)

- (789) *Bu hild'-an* [*hūōl-un* *bul-umna*] *ebeke*
 this go-CVB.SEQ way-POSS.3SG.ACC find-NEG.CVB bear
d'ie-ti-ger *kel-bit*.
 house-POSS.3SG-DAT/LOC come-PST2.3SG
 'Wandering around and not finding the way, she came to a bear's den.'
 (GoI_1930_WomanAndBear_flk.002)

Besides that, modal clauses can also be formed with participles and the postpositions *kördük* 'like' and *tali* 'similar'. The postposition *kördük* 'like' governs the nominative (without possessive suffix) or genitive case (with possessive suffixes) of the participle, whereas the postposition *tali* 'similar' governs the dative-locative case of the participle. In either case, the subjects of the modal clause and the matrix clause may be co-referential ((790) and (792)) or not ((791) and (793)). As for the semantics of the modal clauses, the choice of the postposition appears to make no crucial difference. However, the postposition *tali* 'similar' additionally may convey an unreal reading, like in example (792).

- (794) *Prosta, [min ogo-lor-um iâld'-an-nar]*
 simply.R 1SG.PRO child-PL-POSS.1SG be.sick-CVB.SEQ-3PL
kördö-n-ön kel-bit-im.
 beg-MID-CVB.SEQ come-PST2-1SG
 'Just because my children were sick, I begged [for help] and came [to Dudinka].'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.150)

Besides that, causal clauses can be formed based on participles. Either the possessive ablative form of the relevant participle is used (795), or the nominative and genitive form, respectively, of the relevant participle followed by the postposition *ihin* 'because of' ((796) and (797)).

- (795) [...] *össüö ülele:-bit-im [taba-m]*
 still work-PST2-1SG reindeer-POSS.1SG
it-ill-er-i-tten].
 bring.up-REFL-PTCP.PRS-POSS.3SG-ABL
 '[...] I kept still working because my reindeer are doing well.'
 (ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.035)
- (796) [*Ti ücügej-dik ülel-i:r-im ihin*]
 that good-ADVZ work-PTCP.PRS-POSS.1SG because.of
taksi-bit-im, [kihi-ler-i gitta kepset-er-im]
 go.out-PST2-1SG human-PL-ACC with chat-PTCP.PRS-POSS.1SG
ihin].
 because.of
 'I became [a deputy] because I was working well, because I was talking to the people.'
 (ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.081)
- (797) [...] *on-tu-lara [tuksu-batag-in]*
 that-POSS.3SG-POSS.3PL work-NEG.PTCP.PST-POSS.3SG.GEN
ihin] kim-ne:-bit-ter, oñor-but-tar itinne kalxo:z.
 because.of who.PH-VBZ-PST2-3PL make-PST2-3PL there kolkhoz
 '[Then, after a year had passed], they whatchamacallit, they turned it into a kolkhoz because it didn't work.'
 (BeES_1997_HistoryOfKatyryk_nar.005)

Discourse Organization

10.1 Word Order

Word order in Dolgan is a highly complex matter and is determined by many factors, most of them being pragmatic. Like all Turkic languages, Dolgan exhibits the basic word order SOV: The subject is, thus, placed clause-initially, and the verb is placed clause-finally. Example (798) shows this basic pattern in a pragmatically “neutral” clause with a subject topic and VP focus (see Section 10.2 for details).

- (798) *Hajta:n ka:n-i bagar-a:čči.*
 devil blood-ACC love-HAB.3SG
 ‘The devil loves blood.’
 (PoNA_19910207_Fishing_nar.149)

Expectedly, such clauses are rather exceptional than standard in natural discourse. Mostly, more constituents than a bare subject, a bare object and a verb are included in the clause, and word order is often permuted. In Section 10.1, the following topics are discussed from a syntactic point of view: variation of SOV and SVO, the word order in ditransitive clauses, the word order of adverbials. In Section 10.2, word order permutations due to information structuring are discussed.

As for the variation of SOV and SVO,¹ it is interesting to notice that head-finality is considerably less stringent than in many surrounding languages, especially compared to Sakha, the closest relative of Dolgan. Stapert (2013: 252) compares the linear order of complement and verb in Dolgan and Sakha and shows that Dolgan exhibits almost 25 % VO structures, whereas Sakha exhibits less than 2 % VO structures. As for Dolgan, the same tendency has been observed by Däbritz (2020d: 104–106). From an areal perspective, it is worth mentioning that Dolgan shares this structural property with Nganasan but not

1 Although the labels SOV and SVO are partly incoherent (referring to the syntactic functions *subject* and *object*, but to the word class *verb*), I keep them in this grammar given their wide distribution in language description in general. Moreover, I include also constituents apart from the direct object representing O since they behave similarly in the contexts relevant here.

with the Enets languages (*ibid.*). The following clause contains a head-initial verb phrase, yielding the structure SVO. As for its information structure, the clause is similar to example (798), exhibiting a covert subject topic and VP focus.

- (799) *Tagaj-bat ol ki:h-i.*
 touch-NEG.PRS.3SG that girl-ACC
 'He does not touch the girl.'
 (BeAM_199X_HumanInLandOfDeath_flk.189)

The background of the word order variation SOV ~ SVO is not fully understood yet. In an environment dominated by Russian, it would stand to reason to explain the variation by Russian influence. This may be a relevant factor in certain cases, but there are also good arguments not to assume Russian influence here. On the one hand, the analyzed material in the INEL Dolgan Corpus shows no temporally increasing tendency towards SVO structures, which could be expected, if only Russian influence was the trigger for these structures. In contrast, SOV structures are present in texts which are otherwise heavily influenced by Russian, like in example (800), both *sadovnik* 'gardener' and *gruša* 'pear' being borrowed from Russian. The other way round, also in older texts with much less Russian influence, SVO structures can be observed quite regularly (801).

- (800) *E, sadovnik sadovnik gruša-lar-i komuj-ar.*
 eh gardener gardener pear-PL-ACC gather-PRS.3SG
 'Eh, a gardener, a gardener is collecting pears.'
 (AnIM_2009_Pear_nar.001)
- (801) *Bu iče:n berke ahin-ar ha:maj-in.*
 this clairvoyant very feel.sorry-PRS.3SG Nganasan-POSS.3SG.ACC
 'This clairvoyant felt very sorry for the Nganasan.'
 (BaRD_1930_DaughterOfNganasan_flk.013)

The co-existence of SOV and SVO structures in pragmatically similar clauses gives rise to the question of whether there is a basic structure and, as appropriate, which one it is. From both a statistic and a comparative point of view, the null hypothesis would be that SOV is the basic word order in Dolgan since it is most frequent, and Turkic languages, in general, are considered to be strict SOV languages. This being the case, SVO structures must be explained as derivations from an underlying SOV structure. The reverse case, that is, SOV derived from

SVO, is hardly likely regarding exactly the named arguments. However, there is a third possibility, namely assuming that the verb phrase in Dolgan exhibits a flexible head, whence it could be both head-initial and head-final dependent on the single case. This pattern would yield both SOV and SVO structures; see the theoretical studies of Haider (2018, 2020) for technical details. Although this approach looks compelling to explain the observed variation, it has the severe caveat that it would make the configuration of the verb phrase itself somewhat accidental—this, however, is not the case in Dolgan, as shown in what follows.

As widely known, the basic word order configuration of a language predicts several further structural properties. An SOV configuration indicates modifiers preceding their head noun, postpositions favoured over prepositions, and auxiliary verbs following the main verb. An SVO configuration, in turn, predicts modifiers following their head noun, prepositions favoured over postpositions, and auxiliary verbs preceding the main verb (Comrie 1989: 89–91). These predictions can help to solve the posed problem of determining the basic word order in Dolgan. Since mainly the configuration of the verb phrase is concerned, the auxiliary criterion is taken here as most expressive. If in SVO structures, auxiliaries indeed precede the main verb, it can be assumed that the basic configuration is SVO, too. If, however, in SVO structures, auxiliaries still follow the main verb, it can be assumed that the basic configuration is SOV. In the analyzed material, not a single instance of an auxiliary verb preceding the main verb could be found. In contrast, a couple of dozen instances exhibit SVO word order and an auxiliary following the main verb.

- (802) *Bu ogo hürel-i: hild'-ar buōl-but*
 this child run-CVB.SIM go.AUX-PTCP.PRS become.AUX-PST2.3SG
d'îe-tin att-i-gar.
 house-POSS.3SG.GEN place.beneath-POSS.3SG-DAT/LOC
 'This child began to run around the house.'
 (BeVP_1970_Laajku_flk.015)

- (803) *Ogonn'or-um ile ahin-a:ččî e-t-e*
 husband-POSS.1SG indeed feel.sorry-PTCP.HAB AUX-PST1-3SG
giniler-i togo ere, [...].
 3PL.PRO-ACC why INDF
 'My husband was indeed feeling sorry for them for some reason, [I am afraid of them, I am fleeing].'
 (SuON_KuNS_19990303_HardLife_conv.SuON.114)

Therefore, the verb phrase in Dolgan appears to be basically head-final. Consequently, the basic word order in Dolgan is SOV, and the observed SVO structures are derivations of the former. This conclusion gives rise to the question of the motivation for the variation. No final answer can be given to this question, but surely information structural processes (i.a., topicalization, defocusing of background material) play a significant role here. These are discussed in detail in Section 10.2.

Coming to the word order in ditransitive clauses, the tendencies described above are applicable there, too. Generally, ditransitive clauses are verb-final (804), but the verb can also precede both the direct and the indirect object (805).

- (804) *Ebe, eniē-ke d'ie biēr-iēk-pit.*
 grandmother 2SG.PRO-DAT/LOC house give-FUT-1PL
 'Granny, we will give you an apartment.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.233)

- (805) *Oččogo muŋ hiŋil n'u:čča biēr-bit-e Oruō-ga*
 then most young Russian give-PST2-3SG Oruo-DAT/LOC
küččügüj timir men'ir-ni.
 small iron head-ACC
 'Then the youngest Russian gave Oruo a small iron head.'
 (AsKS_19xx_Amulet_nar.209)

In Section 8.1.4, it was stated that the relative order of direct and indirect objects is subject to variation. On the one hand, information structural phenomena influence the order of direct and indirect objects (see Section 10.2). On the other hand, unmarked direct objects tend to be realized immediately preverbally, in which case the indirect object can only precede them (or be realized postverbally). Considering the basic word order pattern SOV, the question arises whether the relative order S—IO—DO—V or the relative order S—DO—IO—V is the basic one in ditransitive clauses. To answer this question, one has to find clauses in which other factors influencing the word order do not play a role. Therefore, the direct object should be in the accusative or partitive case (otherwise, it is per default placed adjacently to the verb), and both objects should bear the same information structural function. Expectedly, such clauses are comparatively rare in natural speech; just under twenty instances could be found in the analyzed material. In most cases, the indirect object precedes the direct object. In example (806), neither the direct nor the indirect object is aforementioned, and both are included in the focus domain. In example (807),

both objects are aforementioned and included in the focus domain. This clause is especially expressive since the speaker thought about whom she told some stories [= those things]. In the clause before, she emphasizes that it was Tatyana Ivanovna. In this clause, now, she summarizes her thoughts, which is a good indication for a subject topic and VP focus, including both the direct and indirect object.

- (806) *Balik-čit d'on-nor-go i:ra-ni tar-di-m.*
 fish-AGN people-PL-DAT/LOC song-ACC pull-PST1-1SG
 'I brought a song to fishermen.'
 (PoVV_2009_Song_sng.002)

- (807) *Tat'jana Ivanovna-ga o-lor-u kepe:-bit-im.*
 Tatyana Ivanovna-DAT/LOC that-PL-ACC tell-PST2-1SG
 'I told Tatyana Ivanovna those [things].'
 (PoIP_ErAI_2009_Life2_nar.PoIP.027)

Thus, the basic configuration in ditransitive clauses in Dolgan is S—IO—DO—V, and the configuration S—DO—IO—V is derived from the former. One more theoretical argument in favour of this analysis can be named. In Sections 7.3.1.4 and 7.3.1.5, it is described that direct objects in Dolgan correspond to the semantic roles of *theme* and *patient*. In contrast, indirect objects correspond to the semantic roles of *recipient* and *beneficiary*. According to theoretical approaches to semantic roles (Grimshaw 1990, Dowty 1991) as well as functional approaches to their hierarchy (Dik 1978), it is more likely that the direct object—which, in turn, more likely corresponds to patients and themes—is taken by the verb as argument prior to the indirect object. Moreover, this explains why direct objects can be unmarked for case in Dolgan, but indirect objects cannot: The former are higher on the named hierarchies than the latter. When applying this to the basic word order pattern in Dolgan, it seems more reasonable to assume the order S—IO—DO—V as basic since the first internal argument of a verb is more likely to be realized immediately verb-adjacently than its second (and further) internal arguments.

Finally, adverbials shall be discussed here. In Section 8.3, it was stated that the syntactic behaviour of adverbials is manifold in Dolgan, and different patterns have to be kept apart from each other. As a rough tendency, adverbials in Dolgan stand adjacently to what they modify—in other words, they stand adjacently to the constituent(s) they have scope over. According to the basic SOV pattern in Dolgan, it is expected that adverbials precede the latter constituent(s), which is true in most instances. As for the linear position of adverbials

in the clause, two major groups can be distinguished: adverbials whose position depends only on the position of the constituent they modify, and adverbials whose position depends on information structural properties. The former group contains adverbials that modify a single phrase, e.g. an adjective phrase or an adverb phrase (808), but also adverbials that modify the verb without its complements (809).

- (808) *Kin̩it-im* *hürde:k* *üčügej* *d'aktar*.
 daughter.in.law-POSS.1SG **very** good woman
 'My daughter-in-law is a very good woman.'
 (KiPP_2009_Belief_nar.KiPP.083)

- (809) [...] *en'igi-n* *amattan* *i:t-iäk-tara* *hūōg-a*.
 2SG.PRO-ACC **at.all** release-FUT-3PL NEG-3SG
 '[On its entrance, soldiers will be standing], they won't let you [in] at all.'
 (ErSV_1964_WarBirdsAnimals_flk.314)

Additionally, non-referential adverbials that have scope over the whole clause fall into this group. These adverbials, also called "sentence adverbials", tend to be realized clause-initially—even before topics (Däbritz 2021a: 143–144)—but can also appear in other positions in the clause ((810) and (811)). The latter case is even required for the adverb *bihi:la:k* 'probably; apparently', which expresses evidentiality and epistemic modality (812).

- (810) *Araj* *d'aktar-a* *īarakan* *būōl-but*.
suddenly woman-POSS.3SG pregnant become-PST2.3SG
 'Suddenly, his wife got pregnant.'
 (ErSV_1964_WarBirdsAnimals_flk.449)

- (811) *Kūōl-ün*, *ol* *bagar* *ikki* *ij-i* *tut-ar* *kūōl*
 lake-POSS.2SG that **maybe** two month-ACC grab-PTCP.PRS lake
bar, [...].
 EX
 'The lake, maybe it's a lake for hunting for two months, [maybe a lake for hunting for one month].'
 (BeAM_199X_LegendSpiritOfTrees_nar.035)

- (812) *Bu en ki:h-iŋ till-iĕk bihi:lak, [...].*
 this 2SG.PRO daughter-POSS.2SG revive-FUT.3SG **apparently**
 ‘Your daughter will revive apparently, [that is the miracle].’
 (BaRD_1930_DaughterOfNgaranasan_flk.016)

Adverbials, whose linear position in the clause also depends on information structural phenomena, are more complicated to analyze. Most often, such adverbials are VP-adverbials, i.e. they scope over the verb phrase. In basic, pragmatically “neutral” clauses, such adverbials stand before the verb phrase, including its complements. In example (813), two adverbials precede the verb phrase, including an overt subject and an object. Since only one of them can potentially occupy the topic position (see Section 10.2), the example shows that the basic position of VP-adverbials is immediately before the verb phrase itself. This linear order is not surprising, given the above-described patterns, in which other adverbials also immediately precede the phrase they have scope over.

- (813) *Bürde munn’ak-ka kine:s ojun-u kaj-ar: [...].*
once gathering-DAT/LOC prince shaman-ACC force-PRS.3SG
 ‘Once at one gathering, the prince forces a shaman: [...].’
 (BaRD_1930_DaughterOfUrungAjyy_flk.009)

As explained in detail in the following Section 10.2, referring VP-adverbials are a valuable indicator for the topichood of other constituents. In relevant contexts, the VP-adverbial is often preceded by the topical constituent, whereas it still precedes the verb phrase. In example (814), the topic of the clause is *hahiliŋ* ‘the fox’, and the non-topical spatial adverbial *kitil ustun* ‘along the shore’ follows after it.

- (814) *Hahil-iŋ kitil ustun bar-bit, [...].*
 fox-POSS.2SG **shore along** go-PST2.3SG
 ‘The fox went along the shore, [the fishes in the water].’
 (FeA_1931_OldWomanFoxFur_flk.015)

Concluding the patterns described in the above paragraphs, it can be stated that the basic word order in Dolgan is the following:

sentence adverbial—VP-adverbial—subject—indirect object—direct
 object—verb

If the word order does not adhere to the SOV pattern but the SVO pattern, the basic word order is as follows:

sentence adverbial—VP-adverbial—subject—verb—indirect object—
direct object

However, clauses that contain all these constituents are rare in natural speech. Moreover, these word order patterns are often permuted due to information structural factors (see Section 10.2) but may also be accidentally changed due to false starts, hesitations or alike (see Section 10.4).

Finally, the word order in non-declarative clauses is the same as in declarative clauses, which can be shown by (815) and (816).

- (815) *Ogonn'or-uy tug-u gin-a:čči e-t-e=j?*
old.man-POSS.2SG what-ACC make-PTCP.HAB AUX-PST1-3SG=Q
'What was your husband doing?'
(SuON_KuNS_19990303_HardLife_conv.KuNS.067)

- (816) *Kuhagan-nik gim-mit kihi-ni üčügej-dik*
bad-ADVZ make-PTCP.PST human-ACC good-ADVZ
ata:r-iŋ.
accompany-IMP.2PL
'Be good to a person who has done something bad.'
(KiPP_2009_Belief_nar.KiPP.035)

However, in content questions, variation is observed, as described in Section 8.4.2.2: The interrogative pronoun can appear in situ, like in example (815) above, but it can also be realized clause-initially, like in example (817).

- (817) *Kimîe-ke baj-bitin biêr-têk-pit=iŋ, ôl-lök-pütüne?*
who-DAT/LOC wealth-POSS.1PL.ACC give-FUT-1PL=Q die-TEMP-1PL
'Whom will we give our wealth when we die?'
(ChPK_1970_ThreeBoys_flk.011)

10.2 Information Structure

Before dealing with information structural patterns in Dolgan, some terminological issues have to be touched upon to prevent misunderstandings. The term *information structure* is understood here as the linguistic expression of

the pragmatic structure of a proposition in a discourse (Lambrecht 1994: 5), implying that information structure is to be expressed by common linguistic devices, be they phonetical, prosodic, morphological or syntactic. In what follows, syntactic and, to a lesser extent, prosodic devices are most important for the discussion. Within the field of information structure, three distinct layers are distinguished: *topic-comment-structure*, *focus-background-structure* and *information status* (Däbritz 2021a: 287–291). In this section, the former two are discussed, whereas information status is dealt with in Section 10.3 in the context of reference tracking, anaphora and alike.

The *topic* of a clause is that element, which the predication is about (Lambrecht 1994: 118; Junghanns 2002: 12). The *comment*, in turn, corresponds to the predication made about the topic (*ibid.*). In what follows, I use the notion *topic* in a purely Aristotelian sense; issues of givenness or aforementionedness I assume to be realized on the *information status* layer (see Section 10.3). Topics can be non-contrastive and contrastive, whereby the amount of potential non-contrastive topics in a discourse is relatively open, but the amount of potential contrastive topics is closed (Zybatow & Junghanns 1998: 52; Däbritz 2021a: 100–101). From a syntactic point of view, topics can be realized within the clause structure itself (internal topics) or stand outside of it (external topics) (Junghanns 2002: 44–45; Däbritz 2021a: 98–100). The *focus* of a clause corresponds to that constituent, which is most important for the speaker and which the speaker wants to emphasize (Molnár 1991: 58; Junghanns 2002: 13). This approach is in line with Lambrecht's (1994: 207) assumption that "[...] focus is what makes an utterance into an assertion" since the speaker contributes important (e.g. new, unexpected, correcting) information to the discourse to bring the latter forward. The counterpart of focus is *background*, which corresponds to the piece of information the speaker deems less important (Molnár 1991: 58; Junghanns 2002: 13). Focus can be non-contrastive and contrastive, the former simply marking the most important piece of information in a clause, the latter contrasting it to another available piece of information (É. Kiss 1998: 245; Junghanns & Zybatow 2009: 689; Däbritz 2021a: 101–102). The scope of focus can vary within a clause: It can be maximal (including the whole sentence; also *wide focus*), intermediate (including the VP), and minimal (including one single constituent smaller than VP; also *narrow focus*, *argument focus*) (Däbritz 2021a: 178–179). The part of the clause, which is focused, is also referred to as the *focus domain* in what follows.

The most common information structural pattern within natural (monologic) discourse is the topic corresponding to the subject of the clause and the focus domain consisting of the verb phrase (Däbritz 2021a: 178–179). This pattern, which perfectly corresponds to the underlying SOV word order, is regularly attested in Dolgan, like in example (818).

	TOPIC	COMMENT
	BACKGROUND	FOCUS
(818)	[...] <i>bu kihi</i> this human	<i>kirsa huōl-un irde:-bit.</i> polar.fox trace-POSS.3SG.ACC follow-PST2.3SG ‘[Having carried the fish into his house], this human followed the polar foxes trace.’ (PoXN_19701118_Chopochuka_flk.007)

However, as already mentioned at many points in this volume, the word order in Dolgan is far from rigid, and it is commonly used to express information structural patterns. Topical constituents are placed clause-initially in Dolgan, independent from the semantic role they play and independent from the syntactic function they fulfil. The only constraint is their referentiality: Since topics are predicated about in the clause, they must be referential. From a more elaborate syntactic point of view, it is often difficult to prove the clause-initial position of topics; see Däbritz (2021a: Ch. 7.1) for a detailed account. For the sake of the grammar at hand, however, it suffices to say that topics are positioned clause-initially, where they precede all other non-topical referential expressions: In example (819), the topic is the subject of the clause, which precedes a spatial adverbial, the latter belonging to the focus domain. In example (820), the text-internal speaker explains that the fox is afraid because its people and relatives have been killed. The topical constituent is the direct object of the clause and precedes the non-topical subject. In example (821), a man comes into a house and finds two frightened children there, telling him what allegedly happened at night and why they are afraid. Now the man explains, what really happened at night, the adverbial *tü:n* ‘at night’, thus, being the topic of the clause, which precedes both the subject and direct object in the clause.

(819)	[_{TOP} <i>Uska:n ojun-a</i>] hare	<i>kis mas-ka</i> shaman-POSS.3SG winter wood-DAT/LOC <i>oj-but,</i> [...]. jump-PST2.3SG ‘The shaman of the hares jumped onto the wood for the winter [...].’ (ErSV_1964_OldManHares_flk.048)
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an areal point of view, it can be remarked that a similar use of third-person plural possessive suffixes is observed in Nganasan and Ewenki, too (Wagner-Nagy 2019: 210; Däbritz & Gusev 2021).

[Context: My big son has got three children, one of his children is married and has children.]

- (824) [TOP.CONTR *Aɲar-dar-a*] *ogo-lon-o* *ilik-ter*.
 half-PL-POSS.3SG child-VBZ-CVB.SIM not.yet-3PL
 ‘The others don’t have children yet.’
 (KiPP_NN2_2009_Family_nar.KiPP.065–066)

[Context: Once there lived the old men Butterfly and Crutch. They live far from each other, and they know each other.]

- (825) [TOP.CONTR *Birgeh-e*] *ol* *dîek* *d’îe-le:k*,
 other-POSS.3SG that towards house-PROPR.3SG
 [TOP.CONTR *birgeh-e*] *ba* *dîek* *d’îe-le:k*.
 other-POSS.3SG this towards house-PROPR.3SG
 ‘One of them has a house in that direction, and the other one has a house in this direction.’
 (MiPP_1996_OldManButterfly_flk.001–003)

As can be seen in example (825), contrastive topics often do not stand alone, but two or more of them appear subsequently. In those instances, the clause structure of the subsequent clauses is, in most cases, parallel, as is their prosodic realization. The fundamental frequency rises with the constituent functioning as the contrastive topic, and it falls after the main accent of the clause, yielding so-called “hat contours” or “bridge contours”.

Finally, topics can also be realized clause-externally in Dolgan, being intonationally separated from the rest of the clause. In addition, the external topic is frequently anaphorically referred to by a pronominal item in the clause. From a functional perspective, it can be said that external topics lead to a higher degree of saliency of the denoted referent than in the case of clause-internal topics. Statistically, clause-external topics are significantly less frequent than clause-internal topics, which also underlines more marked functions.

- (826) [TOP.EXT *Na:sta in'e-te* *eme:ksin*]_i – *onu-ga*_i
 Nastya mother-POSS.3SG old.woman that-DAT/LOC
törö:-büt-üm.
 give.birth-PST2-1SG
 'As for Nastya's mother, the old woman—I gave birth at hers.'
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.074)

Coming to the expression of focus in Dolgan, both prosody and syntax play an essential role. Prosodically, non-contrastive as well as contrastive foci are marked by high pitch and a subsequent fall of the fundamental frequency after the last stressed syllable within the focus domain (see Section 2.4.2). In the case of contrastive focus, the fall of the fundamental frequency is significantly more distinct than in the case of non-contrastive focus. Given the head-final syntax of Dolgan and the well-known information flow principle(s) (*topic* before *comment*, *not important* before *important*, *given* before *new*; see Chafe 1976 as well as Kim 1988), it is not surprising that the focus accent tends to be realized clause-finally in Dolgan. In the case of maximal (wide) and intermediate (VP) focus, this adheres perfectly to the underlying SOV word order. In the case of minimal (narrow) focus, however, the tendency towards clause-final focus is overruled by the verb-final constraint in Dolgan. Hence, the minimally focused constituent is placed in the “second best” position, namely immediately pre-verbally (see Kim (1988: 149) and Däbritz (2021a: 204–205) for a detailed account). In example (827), the subject of the clause is minimally focused, whereas, in example (828), it is a spatial adverbial. In either case, the position immediately before the verb can be proven by the position of other constituents. The focused constituents follow a direct object, which is usually expected to take the immediately pre-verbal position.

- (827) *Migi-n* [FOC *giniler*] *i:p-pit-ter.*
 1SG.PRO-ACC 3PL.PRO bring.up-PST2-3PL
 'It was them who brought me up.'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.040)
- (828) [...] *minigi-n buō* [FOC *Pata:pava-ga*] *i:p-pit-tara.*
 1SG.PRO-ACC EMPH Potapovo-DAT/LOC send-PST2-3PL
 '[After having arrived in Dudinka], it was Potapovo where I was sent to.'
 (KiLS_KiES_2009_Life_nar.KiLS.028)

Given the observed SVO patterns in Dolgan, which cannot systematically be analyzed as an idiolectal variation or Russian influence (see Section 10.1), the described principles of focus marking evoke the question of how focus is marked in SVO structures. Indeed, Däbritz (2020d: 111–112) shows that SVO structures in Dolgan exhibit a clause-final focus position, as well as that the underlying word order patterns and the focus position can be correlated statistically: In a subset of the data from the INEL Dolgan Corpus, there are 85.7% SOV structures opposed to 14.3% SVO structures, correlating to 86.2% immediately pre-verbal foci opposed to 13.8% clause-final foci. In example (829), the subject of the clause is focused since the fictive storyteller wonders what might be in the (aforementioned) ice hole. As can be seen, the focused constituent is positioned post-verbally and clause-finally.

- (829) *Ojbon-ton bik-pit* [FOC *u: ičči-te*].
 icehole-ABL lean.out-PST2.3SG **water master-POSS.3SG**
 ‘It was the master of water who leaned out of the ice hole.’
 (AkEE_19900810_PearlBeard_flk.013)

Thus, non-contrastive foci are marked prosodically and syntactically, and contrastive foci lack a syntactic marking. This means that the latter are positionally unbound in the clause and marked solely prosodically. Example (830) is from a radio interview. The interviewer talks about traditional midwives among the Dolgans and tells that Dolgan women used to give birth in special tents in the tundra. Now the interviewee, an elderly woman, says that she gave birth to all her children in the hospital. The relevant linguistic expression is placed after the topical subject of the clause. Still, it precedes a spatial adverbial and the verb, which would be impossible in the case of non-contrastive focus.

- (830) [...], *min* [FOC.CONTR *bir da ogo-nu*] *tîa-ga*
 1SG.PRO **one EMPH child-ACC** tundra-DAT/LOC
ogo-lom-motog-um.
 child-VBZ-NEG.PST2-1SG
 ‘[I not a single one], I didn’t give birth to a single child in the tundra.’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.185)

Putting this in a nutshell, the most crucial information structural patterns in Dolgan are as follows. Topics, both non-contrastive and contrastive, are placed clause-initially, whereas non-contrastive foci are placed primarily immediately pre-verbally (adhering to SOV word order), but also clause-finally (adhering to

SVO word order). Contrastive foci, in turn, are positionally not bound and are marked only prosodically.

Additionally, it has to be mentioned that also non-topical background material can appear postverbally, mainly in underlying SOV structures. From a descriptive syntactic point of view, postverbal background material in SOV structures cannot always be distinguished from, e.g. clause-finally realized foci in SVO structures.² Prosodically, however, postverbal background material characteristically exhibits a flat intonation contour, following the focus accent realized within the focus domain. Example (831) is from a text where the speaker explains reindeer herding in much detail. In the given clause, he summarizes the whole story, focusing that earlier, the reindeer herders cared about the reindeer as he has told. The subject and object within the clause, in turn, are backgrounded and realized postverbally.

- (831) [FOC *Ol kördük*] *karaj-a:čči* *e-ti-bit* *bihiği*
 that like care.about-PTCP.HAB AUX-PST1-IPL 1PL.PRO
 taba-ni.
 reindeer-ACC
 ‘Like that, we were caring about reindeer.’
 (KiMN_1975_ReindeerHerding_nar.110)

Considering also postverbal background material, the interaction of information structure, prosody, and syntax is manifold. Prosodically, it can be said that the main accent in the clause is realized at the last syllable within the focus domain, followed by a fall of the fundamental frequency. Syntactically, the information structural patterns in Dolgan can be illustrated by the following schemes.

SOV word order: topic—(background)—focus—verb—(background)
 SVO word order: topic—(background)—verb—focus

10.3 Reference Tracking and Information Status

Reference tracking means monitoring the encoding of participants throughout a given discourse. As a measure of reference tracking, the concept of *inform-*

² See, however, Däbritz (2021: Ch. 8.3) for a derivational syntactic perspective. There, it is shown that both named structures do indeed differ from each other in their underlying syntactic patterns.

ation status is used in this grammar. In contrast to information structure, the term *information status* does not relate to whole clauses but single referents. The information status of a referent corresponds to “[...] the speaker’s assumptions about the hearer’s knowledge/beliefs” (Nissim et al. 2004: 1053). Thus, the information status of a discourse referent denotes its (non-)givenness within a discourse, the three possible information statuses being: *given* (+discourse-old, +hearer-old), *accessible* (-discourse-old, +hearer-old), and *new* (-discourse-old, -hearer-old). The combination (+discourse-old, -hearer-old) does not occur for logical reasons since the hearer is always part of the discourse (Nissim et al. 2004: 1053–1054; Götze et al. 2007: 151). In what follows, I describe how the form of referring expressions correlates to the information status of the denoted referents.

First- and second-person referents always have the information status *given* or *accessible* since they are, per definition, part of the speech situation. They are exclusively referred to by personal pronouns and personal endings, whereby the former often are omitted in natural discourse. In example (832), the first-person plural and second-person singular pronouns can be seen, whereby the corresponding personal ending at the verb also cross-refers to the subject pronoun. In example (833), in turn, reference to a first-person referent is established only by the personal ending at the verb.

- (832) *Oččogo bihigi en’igi-n kej-e-bit.*
 then 1PL.PRO 2SG.PRO-ACC chop-PRS-1PL
 ‘Then we will chop you.’
 (SaSS_1964_NganasanBraveBoy_flk.088)

- (833) *De kajdiēk bar-a-bit?*
 well whereto go-PRS-1PL
 ‘Well, where are we going?’
 (PoTY_2009_Aku_nar.149)

Third-person referents are more complex to track within a discourse. Referents, which are newly introduced into the discourse, are always referred to by a full noun phrase, having the information status *new* or *accessible*. In example (834), which is the first sentence of the given story, both referents have the information status *new* since they are yet unknown in the discourse, and the hearer cannot infer them anyhow. In the examples (835) and (836), the relevant referents have the information status *accessible*, since the hearer can infer them: In example (835), the fishing net is aforementioned and, thus, the hearer can infer via a part-whole-relation and world knowledge that it has an end. In example

(836), the situational context provides the necessary link since the protagonist uttering the clause stands at the shore referred to.

- (834) *Bir hahil arı-ga ka:ttar-bit, [...].*
 one fox island-DAT/LOC get.in-PST2.3SG
 'A fox got onto an island [and swimming it could not get off].'
 (FeA_1931_OldWomanFoxFur_flk.001)

- (835) *Bu ogo ilim kiri-tin bul-bat.*
 this child net edge-POSS.3SG.ACC find-NEG.PRS.3SG
 'The child does not find the end of the net.'
 (KiMN_19900417_Milkmaid_flk.063)

- (836) *Čej, kitil-ga tiks-ıy!*
 hey shore-DAT/LOC come.close-IMP.2PL
 'Hey, come closer to the shore!'
 (FeA_1931_OldWomanFoxFur_flk.010)

Referents having the information status *accessible* can additionally be marked with possessive suffixes of the second or third person singular. The third-person singular suffixes are used for referents, which are accessible via the situational context or inferential relations (837). Second-person singular suffixes are used for all types of accessible referents, including those that can be accessed via world knowledge ((838) and (839)). However, this non-possessive use of possessive suffixes is always facultative in Dolgan.

- (837) [...] *uŋuok-tar-a ere ka:l-bit.*
 bone-PL-POSS.3SG only stay-PST2.3SG
 '[The girl's body had rotten long ago], just the bones remained.'
 (BaRD_1930_DaughterOfNngasan_flk.009)

- (838) [...] *tünnük-kün üöles-kün*
 window-POSS.2SG.ACC chimney-POSS.2SG.ACC
büöle:r, a:ŋ-ŋin ka:j-a:r.
 cover-FUT.IMP.2SG door-POSS.2SG.ACC block-FUT.IMP.2SG
 '[When the shaman of the hares comes and shamanizes], cover the window and the smoke hole, block the door.'
 (ErSV_1964_OldManHares_flk.024)

- (839) *Bilir ka:h-iŋ, kuh-uŋ, čiča:g-iŋ,*
 long.ago goose-POSS.2SG duck-POSS.2SG small.bird-POSS.2SG
lenkej-iŋ – [...].
 snow.owl-POSS.2SG
 'A long time ago geese, ducks, little birds, snow owls—[all birds were
 living in this land].'
 (ErSV_1964_SnowOwl_flk.001)

As for the linguistic expressions of given referents, four types can be distinguished: full noun phrase, personal pronoun, demonstrative pronoun, zero anaphora. Full noun phrases can be used for all aforementioned referents, but the more distant the antecedent of the given referent, the more likely it is to be expressed as a full noun phrase. The head of full noun phrases can additionally be inflected with possessive suffixes of the second and third person singular; however, this is again not obligatory. According to Siegl (2015: 76–77), only the possessive suffix of the second person singular can re-activate a referent in a discourse. The analyzed material, as well as Däbritz (2021a: 252, 258), can only partly confirm this hypothesis: Indeed, re-activated referents are regularly marked with the second-person singular possessive suffix (840), but also the third-person singular possessive suffix appears in relevant contexts (841).

- Context: Well, he met the shaman [...].
 (840) *D'e bu ojun-uŋ kɨr-i:hi.*
 well this shaman-POSS.2SG shamanize-PROB.3SG
 'Well, the shaman was about to shamanize.'
 (BeAM_199X_HumanInLandOfDeath_flk.228)

- Context: We all were together, in Kurya we became a new kolkhoz [...]
 Then ...
 (841) *Kalko:h-un d'e tojot-tor-but bar-an*
 kolkhoz-POSS.3SG.GEN well chief-PL-POSS.1PL go-CVB.SEQ
ih-el-ler, [...].
 go.AUX-PRS-3PL
 'Our kolkhozes chiefs are going away, [and those who were working
 well, all went away].'
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.141)

Personal and demonstrative pronouns can also refer to aforementioned referents. Still, their appearance is more constrained since they most frequently

require their antecedent to be expressed in the immediate left context. As for demonstrative pronouns, most often, the distal and anaphoric demonstrative *ol* is used, but the proximal *bu* and the medial *iti* occur as well. Personal pronouns are almost exclusively used for human referents and more seldom for human-like protagonists in tales and stories like in example (842). Demonstrative pronouns, in turn, can be used for human (843) and non-human (844) referents.

Context: When there is a full moon in the night, dogs raise their head towards the moon and howl.

- (842) *Ginner taj-al-lar Anih-i, [...].*
3PL.PRO recognize-PRS-3PL Anys-ACC
 ‘They recognize Anys, [they miss [her] until today].’
 (AkEE_19900810_GirlAnys_flk.029)

Context: “Oh, it must be our son-in-law and his father.”

- (843) *Bihigi o-lor-go ih-e-bit, diē-bit ogonn’or.*
1PL.PRO that-PL-DAT/LOC go-PRS-1PL say-PST2.3SG old.man
 ‘“We follow them”, the old man said.’
 (PoKK_1964_TwoOrphanBoys_flk.250)

Context:—Well, there was everything, cows, chicken, everything was there.

- (844) – *O-lor-u savxoz tut-a:čči e-t-e, iē?*
that-PL-ACC sovkhov hold-PTCP.HAB AUX-PST1-3SG AFF
 ‘– They were reared by the sovkhov, right?’
 (PoPD_KuNS_2004_Life_conv.KuNS.055)

Personal and demonstrative pronouns can facultatively be inflected with possessive suffixes in relevant contexts. In the case of personal pronouns, only the suffix of the second person singular occurs (845), whereas demonstrative pronouns show both the second- and third-person singular forms. In the case of demonstrative pronouns, the possessive suffix does not attach to the bare stem of the pronoun but to a stem extended with the suffix *-l*, which in turn is the oblique form of the third-person singular possessive suffix (see Section 4.3.2). Whether this stem extension can indeed be analyzed as a possessive suffix from a synchronic point of view is a matter of debate, but the question is finally not relevant for the descriptive purpose followed here. Therefore, the emerging forms are analyzed as containing two possessive suffixes and are glossed accordingly, examples (846) and (847) illustrating this.

Context: Misha stopped working because the reindeer were getting fewer.

- (845) *Onton gini-ŋ strait'el'-ga bar-bit-a*
 then 3SG.PRO-POSS.2SG builder-DAT/LOC go-PST2-3SG
te:te-tin onn-u-gar [...].
 father-POSS.3SG.GEN place-POSS.3SG-DAT/LOC
 'Then he became a builder in place of his father—[in summer, and in winter he also hunts].'
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.153)

Context: This merchant has a milkmaid, somebody who milks the cows.

- (846) *On-tu-ta ūōl ogo-lo:k.*
 that-POSS.3SG-POSS.3SG son child-PROPR.3SG
 'She has a son.'
 (KiMN_19900417_Milkmaid_flk.004)

Context: A charming boy was travelling [nomadizing] with his family.

- (847) *On-tu-ŋ a:t-a "Bulčut" e-t-e.*
 that-POSS.3SG-POSS.2SG name-POSS.3SG hunter be-PST1-3SG
 'His name was "Hunter".'
 (NaLE_2002_StonyBone_flk.006)

Finally, third-person referents can also be expressed via zero anaphora if the given referent corresponds to the subject of the clause: Verbal morphology always points unambiguously to the person and number of the subject. Reference via zero anaphora only occurs if the given referent is aforementioned in the immediately preceding context, like in example (848).

- (848) *Oksa:na-ŋ iti ... Sapočnaj-dar-ga bar-d-a būō*
 Oksana-POSS.2SG that Sopochnoe-PL-DAT/LOC go-PST1-3SG EMPH
er-ge.
 husband-DAT/LOC
 'Your Oksana ... She is married off to Sopochnoe.'
 (KiPP_KuNS_200211_LifeChildren_conv.KuNS.078–079)

10.4 False Starts, Fillers and Placeholder Items

Natural language and discourse are often not as straightforward and transparent as descriptive and prescriptive grammars may suggest. Speakers start an utterance but abort it since something unexpectedly came to their minds, or they want to correct themselves. Another frequent phenomenon observed is that speakers search for a specific item to express what they want to say, but they do not find it and somehow have to cope with it in the given speech context. Generally, it can be said that the named phenomena occur much more frequently in conversations and free narratives than in folklore texts. This section discusses three phenomena related to apparent inconsistencies in a discourse, namely false starts, fillers and placeholder items.

False start means that the given speaker begins to utter a word or a more complex unit but breaks off and starts anew. The false start can be represented by a complete word like in example (849) but also by the fragment of a word like in example (850).

- (849) *Oččogo kambina:t-tar-ga ülel-ir er-dek-pine, (biêh)*
 then combine-PL-DAT/LOC work-PTCP.PRS AUX-TEMP-1SG **five**
hette ûon biês-te:k d'il-ga.
 seven ten five-PROPR year-DAT/LOC
 'Then, when I was working in the combine, in the year fifty, eh, seventy-five.'
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.077)

- (850) *Onton dûo tayara-ni (u:r-al-) ug-al-lar onno, [...].*
 then MOD icon-ACC **lay-PRS** stick-PRS-3PL thither
 'Then one (lay-), eh, sticks the icon in, [then the water becomes holy water].'
 (SuAA_20XX_NameGiving_nar.008)

These instances are concerned with correcting already uttered language material; thus, they are instances of self-repair. In contrast, speakers having word-finding trouble are expected to produce appropriate language material but search for the latter. Given this, they may use different strategies to cope with this situation. The strategy most easily to analyze is the mere interruption of speech, i.e. making a pause and continuing after this pause with the word sought for.

- (851) *Beje-tin üle-ti-ger ol Papov*
 self-POSS.3SG.GEN work-POSS.3SG-DAT/LOC that Popov
 (PAUSE, 3s) *huruj-ar, [...].*
 write-PRS.3SG
 'In his paper that Popov ... writes [from which people we stem from, the Dolgans stem from].'
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.005)

More often, however, speakers use some non-silent item, being called *filler* (Fox 2010: 2) that delays the pronunciation of the following word. This filler item can be a non-lexical sound, whereby *e:* is by far the most frequent in Dolgan, like in example (852). Very frequently, also demonstrative pronouns (853), particles (854) or a combination of the latter do occur (855). As for now, no regularity or pattern in their usage could be observed, which may be explained by the functional domain overall dominated by irregularity. Nevertheless, further research from a conversational pragmatic perspective is desirable.

- (852) *Hajin hit-tak-kina iti, e:, hopküös-ka ülel-i:l-ler.*
 in.summer lie-TEMP-2SG that **eh** sovkhöz-DAT/LOC work-PRS-3PL
 'In summer, when one does not nomadize, eh, they work at the sovkhöz.'
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.132)
- (853) *Onton buöllagına bu, e:, bu ogo-nu törö:büt-üm, [...].*
 then though **this** eh this child-ACC give.birth-PST2-1SG
 'But then this, eh, I had this child, [then after I had born that boy].'
 (KiES_KiLS_2009_Life_nar.KiES.002)
- (854) *Ani buöl-but, d'e, olor-ol-lor bîä, [...].*
 now become-PST2.3SG **well** live-PRS-3PL **oh**
 'Now it became, well, one lives, oh, [one struggles along].'
 (PoPD_KuNS_2004_Life_conv.PoPD.145)
- (855) *Ogo-lor-gut onton, e:, bu ke, e: üöske:n*
 child-PL-POSS.2PL then **eh this well** eh be.born-CVB.SEQ
is-ti-ler?
 go.AUX-PST1-3PL
 'Your children then, eh, well, were born then?'
 (KiPP_KuNS_200211_LifeChildren_conv.KuNS.022)

As mentioned in the formally oriented Sections 3.3.2.4 and 3.5.5, Dolgan exhibits three placeholder items, which occur in the given or at least similar contexts. *Placeholders* are a particular type of fillers, also called *lexical fillers* or *oblitive nouns/verbs*. Their main characteristic is replacing another referential expression in a given context, taking the same syntactic slot as the latter. Morphologically, they often, but not necessarily, mirror the features of the replaced item (Hayashi & Yoon 2010: 37; Podlesskaya 2010: 18–23). From a functional perspective, they keep the speech going on and signal the hearer that the speaker is still formulating their utterance (Fox 2010: 5–6).

The Dolgan placeholder items are *kim* (literally the interrogative pronoun ‘who’), *kimne:-* (verbalized form of *kim*) and *kan’u:-*. Däbritz (2018a: 298) concludes that they appear in slightly different domains: The former two are used in the case of word-finding trouble and, thus, occur before the item they replace, whereas the latter is instead an item summing up similar referents, and occurs after the item it replaces/mirrors.

Being a nominal item, *kim* replaces nominal referents and most often mirrors the replaced item’s morphology completely. In example (856), the item *ed’ijim* ‘my elder sister’ is replaced by *kimim* ‘my whatchamacallit’, exhibiting the first-person singular possessive suffix. In example (857), the possessee in a possessive clause is replaced, suffixed with the propriative suffix -LA:K. The replaced referent is most often added later in the clause, but it may also be absent, like in example (858).

- (856) [...] *ol kim-im, ol ed’ij-im öl-büt-e.*
 that **who.PH-POSS.1SG** that older.sister-POSS.1SG die-PST2-3SG
 ‘[Why, then later] my whatchamacallit, my elder sister died.’
 (KiES_KiLS_2009_Life_nar.KiES.019)

- (857) *Kim-ne:k e-ti-bit, pr’ijomn’ik-ta:k, [...].*
who.PH-PROPR be-PST1-1PL receiver-PROPR
 ‘We had a whatchamacallit, a receiver, [...].’
 (ELBK_KuNS_2004_Storytellers_conv.ELBK.107)

- (858) [...], *horok kihi-ler-iŋ küren-ette:-bit-ter iti*
 some human-PL-POSS.2SG flee-MULT-PST2-3PL that
kimie-ke ...
who.PH-DAT/LOC
 ‘[So when those people were taken away, the families were frightened],
 some people fled to whatchamacallit’
 (BeES_1997_HistoryOfKatyryk_nar.071)

In turn, the verbal placeholder *kimne:-* replaces verbal items in the discourse. Basically, it exhibits the same patterns as its nominal counterpart, preceding the replaced item and mirroring the latter's morphosyntax (859). Despite the complex Dolgan verbal morphology, even analytic verb forms strongly tend to be entirely mirrored at the placeholder item (860); only a few exceptions can be observed in the analyzed material. Finally, the verbal placeholder *kimne:-* may lack an overt lexical counterpart in the given clause, like in example (861).

- (859) *Kim-ne:-ŋ, ald'at-ala:-ŋ gini*
who.PH-VBZ-IMP.2PL break-ITER-IMP.2PL 3SG.PRO
palačinka-tin.
 record-POSS.3SG.ACC
 'Do whatchamacallit, break her record.'
 (LaVN_KuNS_1999_MusicRepressions_conv.LaVN.008)

- (860) [...] *kim-i da kim-ne:-čči-te hūōk*
who-ACC INDF who.PH-VBZ-PTCP.HAB-POSS.3SG NEG
e-ti-lere, huruj-a:čči-ta hūōk e-ti-lere
AUX-PST1-3PL write-PTCP.HAB-POSS.3SG NEG AUX-PST1-3PL
urut.
 earlier
 '[No, I didn't hear that somebody should sing in radio], they didn't whatchamacallit, they didn't record anybody.'
 (ElBK_KuNS_2004_Storytellers_conv.ElBK.074)

- (861) *Oj ti:s-ter-in bari-tin*
EXCL tooth-PL-POSS.3SG.ACC all-POSS.3SG.ACC
kim-ne:-t-e bihila:k.
who.PH-VBZ-PST1-3SG apparently
 'Oh, it probably whatchamacallit all its teeth.'
 (PoTY_2009_Aku_nar.042)

In contrast to the two items discussed until now, the verbal placeholder *kan'a:-* serves another function: It is used as a cover item for related and similar events, its translational equivalent often being "and so on". Thereby, it follows the verb mostly immediately and mirrors its morphology completely, as seen in the examples (862) and (863).

- (862) *Taɣn-a-git, kan'-i-git.*
 dress-PRS-2PL and.so.on.PH-PRS-2PL
 'You dress and so on.'
 (ChSA_KuNS_2004_ReindeerHerding_conv.ChSA.071)
- (863) [...] *ur-atala: d'e bari-tin*
 lay-MULT.IMP.2SG well all-POSS.3SG.ACC
aragi:-la:-bit-tarin
 alcohol-VBZ-PTCP.PST-POSS.3PL.ACC
kan'a:-bit-tarin.
 and.so.on.PH-PTCP.PST-POSS.3PL.ACC
 '[Wait, let it like this, let's look at these], lay all [pictures] down where
 they are drinking alcohol and so on.'
 (ChGS_UoPP_20170724_SocCogOrder_conv.ChGS.010)

10.5 Direct and Indirect Speech

Within natural discourse, there may be different layers of communication or speech settings: On the one hand, there is the basic speech setting, in which the speaker talks to the hearer(s). On the other hand, there may be different speech settings embedded into the basic speech setting, the speaker reporting the former. This constellation yields four important participants: speaker and hearer of the original utterance and speaker and hearer in the matrix discourse. Given this, essential questions of perspective and reference arise, that is, how the initial utterance is transmitted to the matrix discourse.

In Dolgan, embedded speech settings are exclusively transmitted via usual direct speech. There are no quotation mechanisms such as logophoric pronouns, devices of switch-reference or alike. Usually, embedded direct speech is introduced by one of the following speech verbs.

<i>dîe-</i>	to say
<i>haɣar-</i>	to say, to speak
<i>et-</i>	to speak
<i>kepse:-</i>	to tell
<i>ûögüle:- ~ ü:güle:-</i>	to shout
<i>igîr- ~ inîr-</i>	to call
<i>ijît-</i>	to ask
<i>kördö:-</i>	to beg

The speech verb may precede the string of embedded speech (864) or follow after it (865). In either example, it can be seen that within the embedded speech, the hearer is directly addressed with second-person forms. Due to the introductory speech verb, it becomes clear that these forms do not refer to the hearer(s) of the matrix discourse but the hearer(s) of the embedded utterance.

- (864) *In'e-bit* *dîē-čči* *e-t-e:* *"N'učča-lar*
 mother-POSS.1PL say-PTCP.HAB AUX-PST1-3SG Russian-PL
kel-li-ler, *kisten-iŋ,* *kisten-iŋ!"*
 come-PST1-3PL hide-IMP.2PL hide-IMP.2PL
 'Our mother used to say: "The Russians come, hide, hide!"'
 (SuON_KuNS_19990303_HardLife_conv.SuON.025-026)

- (865) *"Kaja* *hir-ten* *kel-li-ŋ?"*, *ijip-pit-tar.*
 what.kind.of place-ABL come-PST1-2SG ask-PST2-3PL
 "Where do you come from?", they asked.'
 (AkEE_19XX_BoySister_flk.053)

Additionally, it is worth mentioning that both the sequential and the simultaneous converb of the speech verb *dîē*- 'say' may be used for marking an utterance as reported. In this case, the converb immediately follows after the embedded string. Besides that, another finite speech verb often appears in the matrix clause, too. Person-number reference within the embedded string of speech is not changed either. In example (866), the reported speech is followed by the sequential converb of *dîē*-, and still a finite form of *haŋar*- 'say; speak' appears. Within the reported speech, reference to the second-person singular hearer is established, which is not switched by the speaker in the matrix discourse, although it is not the hearer in the matrix discourse who is addressed.

- (866) *Bir da* *kihi* *"kel-li-ŋ* *e:t"* *dîē-n*
 one EMPH human come-PST1-2SG EVID say-CVB.SEQ
haŋar-ba-t-a.
 speak-NEG-PST1-3SG
 'Nobody said: "You have come apparently!"'
 (BaRD_YaP_1930_HumanInAnotherWorld_flk.012)

The relevant converbs of *dîē*- 'say' can be analyzed as a quotative marker since they appear to be semantically bleached. This can be shown by a couple of instances, in which they are still followed by finite forms of the same verb, like in example (867). A peculiar structure can be observed primarily in Upper

Dolgan, where the reduplicated simultaneous converbs of *dîe*- ‘say’ co-occur with the finite verb *gîn*- ‘make’ (868). In either case, it has to be kept in mind that using these quotative markers never entails reference switches within the reported speech.

- (867) *“Kirdik da, onno hu:r-ka ka:l-bit buôlla”,*
 truth and there temporary.camp-DAT/LOC stay-PST2.3SG MOD
d-i: d-i:l-ler, [...].
 say-CVB.SIM say-PRS-3PL
 “‘And indeed it seems to have stayed at the station”, they say, [...].’
 (KiMN_1975_ReindeerHerding_nar.086)

- (868) *“Töttörü bar-îagiñ, d-i-d-i: gîn-ar.*
 back go-IMP.1PL say-CVB.SIM-say-CVB.SIM make-PRS.3SG
 “Let us go back”, he says.
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.054)

Lexicon

11.1 Semantic Fields

11.1.1 General Issues and Basic Vocabulary

The idea of listing the basic vocabulary of a language is not in the least new. Moris Swadesh's list of basic vocabulary is the most prominent approach, whose final version was published in Swadesh (1971). In recent years, with the increasing emergence of formerly unknown language material and computational methods, Swadesh's approach was thoroughly worked upon and further developed. The Leipzig-Jakarta list of basic vocabulary (Tadmor 2009) aims at listing the linguistic items least prone to borrowing from a cross-linguistic perspective. Interestingly, the resulting list has roughly two-thirds of the items in common with the final Swadesh list, which is finally a tremendous empirical support for Swadesh's mainly intuitive account. In what follows, the Dolgan equivalents of those items are listed, which occur on both lists. The information included in Chart 166 is: meaning (in English), Dolgan equivalent, the provenance of the item in Dolgan,¹ frequency (number of tokens) in the INEL Dolgan Corpus. The chart is ordered alphabetically and not by frequency to facilitate searching.

CHART 166 Alphabetical list of basic vocabulary

Meaning	Dolgan equivalent	Provenance	Tokens
arm/hand	<i>il̥i:</i>	inherited	75
ash	<i>k̥ül</i>	inherited	3
big	<i>ulakan</i>	= Sakha	185
bird	<i>kötör</i>	= Sakha	43
		PTCP.PRS of <i>köt-</i> 'fly'	
bite	<i>it̥ir-</i>	inherited	4

1 *Inherited* means here simply that the item is of Turkic origin. It does not take into account possible semantic shifts. Thus, *b̥i̥ar* 'liver' is labelled as inherited, though the meaning may be different in other Turkic languages, e.g. the Turkish cognate *bağır* 'breast'.

= *Sakha* means that the item is known in both Dolgan and Sakha, but absent in other Turkic languages.

CHART 166 Alphabetical list of basic vocabulary (*cont.*)

Meaning	Dolgan equivalent	Provenance	Tokens
black	<i>kara</i>	inherited	13
	<i>koŋnomuōj</i> ²	< Ewenki	3
blood	<i>ka:n</i>	inherited	43
bone	<i>oŋuōk</i>	inherited	33
breast	<i>tūōs</i>	inherited	9
burn (intr.)	<i>ubaj-</i>	= Sakha	20
come	<i>kel-</i>	inherited	860
dog	<i>it</i>	inherited	57
drink	<i>is-</i>	inherited	95
ear	<i>kulga:k</i>	inherited	5
eat	<i>aha:-</i>	verb from <i>as</i> 'food' ³	208
	<i>hūe-</i>	inherited	155
egg	<i>himi:t</i>	inherited	4
eye	<i>karak</i>	inherited	84
fire	<i>uōt</i>	inherited	61
fish	<i>balik</i>	inherited	126
flesh/meat	<i>et</i>	inherited	44
give	<i>bier-</i>	inherited	286
good	<i>üčügej</i>	= Sakha	195
	<i>ötüō ~ ütūō</i>	inherited	51
hair	<i>as</i>	inherited	11
hear	<i>ihit-</i>	inherited	113
horn	<i>mūōs</i> ⁴	= Sakha	15
I (1 SG.PRO)	<i>min</i>	inherited	781
knee	<i>tobuk</i>	inherited	18
	<i>töhök</i> (only Upper Dolgan)	???	6
know	<i>bił-</i>	inherited	235
leaf	<i>hebirdek</i>	inherited	2
leg/foot	<i>atak</i>	inherited	58
liver	<i>bīar</i>	inherited	7

² Only used for reindeer.

³ The term *as* 'food' is inherited in Turkic languages.

⁴ As for reindeer, *mūōs* rather means 'antlers' than 'horn', but the item can also be used when speaking about cows, goats or other cattle.

CHART 166 Alphabetical list of basic vocabulary (*cont.*)

Meaning	Dolgan equivalent	Provenance	Tokens
long	<i>uhun</i>	inherited	26
louse	<i>bit</i>	inherited	2
mouth	<i>an'ak ~ ajak</i>	inherited	13
name	<i>at</i>	inherited	144
neck	<i>mūōj ~ mo:j</i>	inherited	11
new	<i>haŋa</i>	inherited	50
night	<i>tü:n</i>	inherited	26
nose	<i>munnu</i>	re-analysis of <i>munn-u</i> 'nose-POSS.3SG' ⁵	9
not ⁶	<i>hūōk</i>	inherited	649
one	<i>bir</i>	inherited	412
rain	<i>hami:r</i>	inherited	2
red	<i>kihil</i>	inherited	13
root	<i>törüt</i>	inherited	18
sand	<i>kumak</i>	inherited	5
say	<i>diē- ~ di:-</i>	inherited	1641
	<i>haŋar-</i>	verb from <i>haŋa</i> 'voice'	20
see	<i>kör-</i>	inherited	465
skin/hide	<i>tiri:</i>	inherited	70
small	<i>küččügüj ~ kuččuguj</i>	inherited	64
	<i>kira</i>	inherited	28
smoke	<i>burūō</i>	= Sakha	33
soil/earth	<i>hir</i>	inherited	212
stand	<i>tur-</i>	inherited	405
star	<i>hulus</i>	inherited	4
stone/rock	<i>ta:s</i>	inherited	66
tail	<i>kuturuk</i>	inherited	26
this	<i>bu</i>	inherited	1260
tongue	<i>til</i>	inherited	35 ⁷
tooth	<i>ti:s</i>	inherited	6

5 The underlying form *murun* is inherited.

6 The problems of the item 'not' are apparent. Here, the negative existential noun *hūōk* is chosen as equivalent, although it surely does not cover all of the semantic connotations of English *not*.

7 Also instances of *til* 'language' are counted here.

CHART 166 Alphabetical list of basic vocabulary (*cont.*)

Meaning	Dolgan equivalent	Provenance	Tokens
water	<i>u:</i>	inherited	137
what	<i>tūōk</i>	= Sakha	722
who	<i>kim</i>	inherited	563
you (2SG.PRO)	<i>en</i>	inherited	232

It is not surprising that most basic vocabulary items can directly be traced back to Proto-Turkic roots. However, there is one noteworthy exception: Besides the inherited colour term *kara* 'black', there is the term *koɣnomūōj* 'black' (< Ewenki *koɣnomo* 'id.'), whereby the latter is only used for describing reindeer. Also, within the inherited vocabulary, there are some shifts in meaning and derivation processes worth a comment. The term denoting 'bird' is the lexicalized present participle *kōtōr* of the verb *kōt-* 'fly', whereas the Dolgan successor *kus* of PT **quš* has narrowed its meaning to 'duck'. The verbs *haɣar-* 'speak' and *aha:-* 'eat' are recent verbalizations of the nouns *haɣa* 'voice' and *as* 'food', respectively. As for the concept of eating, there are two verbs used in Dolgan speech, namely *aha:-* and *hiē-*. The former is used exclusively in intransitive clauses (869) and transitive clauses with the direct object *as* 'food' (870). The latter is used chiefly in transitive clauses with direct objects pointing to concrete referents (871); seldom, it can also occur in other domains.

- (869) *Hir-ten ah-i:r taba.*
 ground-ABL eat-PRS.3SG reindeer
 'Reindeer eat from the ground.'
 (KiPP_2009_Story_nar.KiPP.029)

- (870) *Bar-an-nar d'e ol ah-in ah-i:hi-lar.*
 go-CVB.SEQ-3PL well that food-POSS.3SG.ACC eat-PROB-3PL
 'They go and are about to eat his food.'
 (MiPP_1996_OldManButterfly_flk.017)

- (871) *Urut uska:n-i hiē-bet ühü-ler.*
 earlier hare-ACC eat-NEG.PTCP.PRS they.say-3PL
 'In the past, it is said, they did not eat hares.'
 (ErSV_1964_OldManHares_flk.057)

After this mechanical approach to listing the most basic vocabulary of Dolgan—whereby “most basic” is to be understood according to Swadesh (1971) and Tadmor (2009)—the following sections describe several semantic fields more thoroughly.

11.1.2 *Kinship*

The kinship terminology in Dolgan has already been studied in various works. Popov (1946: 73–74) provides an extensive list of Dolgan kinship terms, collected on field trips in 1930 and 1931. However, it has to be remarked that some features—especially word-initial *s* in place of *h*—make the terms look like their Sakha cognates. Whether this is due to Sakha influence on whatever level or due to Sakha orthography used for Dolgan words can hardly be answered. Nevertheless, many terms named by Popov (1946) differ from their usage in Sakha, whence their origin is probably indeed Dolgan. Stapert (2013: 136–144) analyzes in much detail how Ewenki has influenced the structure of Dolgan kinship terminology. In what follows, the essential traits of Dolgan kinship terminology is described based on both named sources and the INEL Dolgan Corpus. However, since the system of kinship terminology in Dolgan is highly complex and cannot be discussed in all detail here, some aspects and groups of relatives remain untouched (e.g. cousins or great uncles/aunts and co-siblings-in-law).

Within kinship terminology in Dolgan, several parameters are decisive. First of all, blood relatives are relatively clearly distinguished from relatives related by marriage. The only exception in the fields discussed here are the terms for female ego’s husband’s siblings, as shown in Chart 170 below. Another common thread is the specification of the named person’s relative age either to ego or to the named person’s sibling. Additionally, it is worth mentioning that in the case of younger siblings, no distinction of sex—neither of the named person nor ego—is made. Especially the latter fact clearly points to Ewenki influence in this domain, how Stapert (2013: 136–144) has analyzed in detail. Finally, it should be mentioned that kinship terms are almost obligatorily affixed with possessive suffixes in Dolgan speech. For the sake of clearness, the possessive suffixes are not included in the following lists, but only the stem is given.

Direct line relatives, that is, (grand)parents and (grand)children, are named as follows.

mother	<i>in’e</i> (less used variant: <i>ije</i>)
father	<i>aga</i>
grandmother	<i>ebe</i>

grandfather	<i>ehe</i>
child	<i>ogo</i>
daughter	<i>kɨ:s</i>
son	<i>uōl</i>
grandchild	<i>vnuk (bnuk, binuk) ~ ogom ogoto</i>
granddaughter	<i>vnučka ~ ogom kɨ:ha</i>
grandson	<i>vnuk (bnuk, binuk) ~ ogom uōla</i>

As can be seen from the list, the sex of ego is not important for naming direct line relatives, but the sex of the respective relative is. Moreover, Dolgan has no simplex lexemes for grandchildren but either uses compounds (*ogom ogoto*, *ogom kɨ:ha*, *ogom uōla*) or the Russian terms *vnuk* ‘grandson’ and *vnučka* ‘granddaughter’. The structure of the compounds is the following: “child-POSS.1SG child/daughter/son-POSS.3SG”. Thereby, the obligatory possessive suffix is attached to the first item of the compound, which is shown here by the placeholder POSS.1SG.

Stepchildren are named likewise (i.e. *ogo*, *uōl* and *kɨ:s*, respectively), but the denomination of stepparents differs. The stepfather is called *amira:n ~ amiran*, a loanword from Ewenki *ami:ra:n* (Boldyrev 1994: 265). The stepmother is called *in’ere:n ~ ijere:n*, which is an amalgamation of the Dolgan lexeme *in’e ~ ije* ‘mother’ and the Ewenki lexeme *ən’irə:n* ‘stepmother’ (Boldyrev 1994: 190).

As for siblings, there are three parameters principally distinguishable: sex of ego, sex of the sibling, and relative age of the sibling to ego. Stapert (2013: 136) has shown convincingly that in Dolgan, only the latter two parameters are relevant. This pattern, in turn, is an apparent deviation from Sakha and can be explained by Ewenki influence since Ewenki exhibits precisely the same structure as displayed by Dolgan. More specifically, in Dolgan, the terms *ubaj* ‘older brother’ and *ed’ij* ‘older sister’ have lost their reference to ego’s sex, which is present in Sakha. The term *balis* ‘younger sibling’ distinguishes neither ego’s nor the sibling’s sex. Chart 167 shows the Dolgan pattern in comparison with Sakha and Ewenki.

The denomination of uncles and aunts largely follows the pattern of denominating siblings. Once more, the named person’s sex and their relative age to their sibling are decisive, but not ego’s sex. Moreover, patrilinear and matrilinear uncles and aunts are not distinguished. This is a clear difference from Sakha and can again be explained by Ewenki influence since the Dolgan pattern resembles the Ewenki one. From a semantic point of view, it is interesting to note that there are no lexemes, which solely denominate uncles or aunts. Uncles and aunts older than their relevant sibling are named *ehe* ‘lit. grandfather’ and *ebe* ‘lit. grandmother’. In turn, uncles and aunts younger than their

CHART 167 Kinship terms—Siblings (following Stapert (2013: 136))

	Sakha	Dolgan	Ewenki
male ego's older brother	<i>bi:</i>	<i>ubaj (ibaj)</i>	<i>aki:n</i>
female ego's older brother	<i>ubaj</i>	<i>ubaj (ibaj)</i>	<i>aki:n</i>
male ego's older sister	<i>edžij</i>	<i>ed'i:j</i>	<i>aki:n</i>
female ego's older sister	<i>ayas</i>	<i>ed'i:j</i>	<i>aki:n</i>
male ego's younger brother	<i>ini</i>	<i>balis</i>	<i>nəku:n</i>
female ego's younger brother	<i>surus</i>	<i>balis</i>	<i>nəku:n</i>
male ego's younger sister	<i>balis</i>	<i>balis</i>	<i>nəku:n</i>
female ego's younger sister	<i>balis</i>	<i>balis</i>	<i>nəku:n</i>

CHART 168 Kinship terms—Uncles and aunts (following Stapert (2013: 139))

	Sakha	Dolgan	Ewenki
ego's father's older brother	<i>abaya</i>	<i>ehe</i>	<i>ama:ka</i>
ego's mother's older brother	<i>ta:j</i>	<i>ehe</i>	<i>ama:ka</i>
ego's father's older sister	<i>ed'i:j</i>	<i>ebe</i>	<i>ənə:kə</i>
ego's mother's older sister	<i>ta:j ed'i:j</i>	<i>ebe</i>	<i>ənə:kə</i>
ego's father's younger brother	<i>abaya</i>	<i>ubaj (ibaj)</i>	<i>aki:n</i>
ego's mother's younger brother	<i>ta:j</i>	<i>ubaj (ibaj)</i>	<i>aki:n</i>
ego's father's younger sister	<i>ed'i:j</i>	<i>ed'i:j</i>	<i>aki:n</i>
ego's mother's younger sister	<i>ta:j ed'i:j</i>	<i>ed'i:j</i>	<i>aki:n</i>

relevant sibling are named *ubaj* 'lit. older brother' and *ed'i:j* 'lit. older sister'. This denomination suggests that—at least linguistically—the former group of uncles/aunts is on a par with ego's grandparents, and the latter group is on a par with ego's older siblings. Chart 168 summarizes the kinship terms denoting uncles and aunts.

Whereas the denomination of siblings, as well as uncles and aunts, is rather complex, nephews and nieces seem to be referred to with one single term, namely *balis* 'lit. younger sibling'. However, it has to be mentioned that neither the used corpus nor the published sources are fully meaningful in this respect. Stachowski (1998: 49–50), referring to Popov (1946: 73), only gives the translations 'nephew; ego's sister's son; ego's sister's daughter; ego's brother's daughter (younger than ego)'. Since Ewenki exhibits precisely the pattern of not differ-

entiating any nephew or niece and denotes them with *nəkun* ‘younger sibling’ (see above), it seems nevertheless reasonable to assume this for Dolgan, too. From a semantic point of view, this means that nephews and nieces are on a par with ego’s younger siblings.

As for cousins, the situation is even less clear. Popov (1946) and Stachowski (1998) specify some relationships, but by far not all. The terms *ubaj*, *ed’ij* and *balis*—all denoting originally siblings—seem to be central here as well. E.g., ego’s uncle’s children are said to be called *ubaj* (if older than ego) and *balis* (if younger than ego) (Popov 1946: 73–74; Stachowski 1998: 50, 257–258). The circumstance that the cousin’s age relative to ego’s age seems decisive makes it logical to assume that the terms denoting siblings are used in all other cases, too. However, this cannot be finally answered here and calls for further research.

Coming to relatives related by marriage, it has first to be stated that the system of their denomination is highly complex and at least partially influenced by Ewenki, too. Husband and wife are called *er* and *d’aktar*, respectively, which originally simply means ‘man’ and ‘woman’. In more colloquial speech, they are also referred to with *ogonn’or* ‘old man’ and *babiska* ~ *babuska* ‘old woman’ (< Russian *babuška* ‘id.’). The observed pattern is like in Ewenki (*ədi*: ‘man; husband’ and *asi*: ~ *ahi*: ‘woman, wife’; Boldyrev 1994: 110, 201), but differs from Sakha, where three separate lexemes are used: *er* ‘man’ and *džaxtar* ‘wife’ opposed to *kerge* ‘spouse’ (Stapert 2013: 143). Likewise, the verb ‘marry’ shows some peculiarities. Whereas Sakha uses *kerkennen-* (< *kerge*-LAN ‘spouse-VBZ.REFL/MID’), Dolgan specifies this, concerning the spouse’s sex: *erden-* (< *er*-LAN ‘husband-VBZ.REFL/MID’) is used for women and *d’aktardan-* (< *d’aktar*-LAN ‘wife-VBZ.REFL/MID’) is used for men (Stapert 2013: 143). Additionally, the phrases *er-ge bar-* ‘husband-DAT/LOC go’ = ‘go to the husband’ and *er-ge tagis-* ‘husband-DAT/LOC go.out’ = ‘go out to the husband’ can be used when talking about women, like in example (872).

- (872) *Kur’a-ga* *er-ge* *taksi-bit-ij*, [...]
 Kurya-DAT/LOC husband-DAT/LOC go.out-PST2-2SG
 ‘You got married in Kurya, [what was your husband’s name]?’
 (LaVN_KuNS_1999_FateOfANortherner_conv.KuNS.015)

The children-in-law are called *kütüöt* ‘son-in-law’ and *kini:t* ‘daughter-in-law’, irrespective of ego’s sex. In the case of parents-in-law, only the sex of the named person is relevant, not ego’s sex. Stapert (2013: 141) convincingly shows that this is once more a clear divergence from Sakha and to be explained by Ewenki influence. However, one comment is necessary here. Stapert (2013:

CHART 169 Kinship terms—Parents-in-law (largely following Stapert (2013: 141))

	Sakha	Dolgan	Ewenki
male ego's father-in-law	<i>aya kilin</i>	<i>kilin ~ kinni</i>	<i>atki:</i>
female ego's father-in-law	<i>tojon</i>	<i>kilin ~ kinni</i>	<i>atki:</i>
male ego's mother-in-law	<i>ije kilin</i>	<i>in'e kilin ~ in'e kinni</i>	<i>atki:</i>
female ego's mother-in-law	<i>χotun</i>	<i>in'e kilin ~ in'e kinni</i>	<i>atki:</i>

141) gives the form *kinni* ‘father-in-law’, which is historically the metathesized or oblique stem of *kilin* ‘id.’ (see Section 2.5.4 on syncope and metathesis in non-first syllables). Like many relational nouns (see Section 3.1.3), the oblique stem has at least partially been re-analyzed as the base form in Dolgan. The material analyzed here exhibits both variants: The token *kinni-i-gar* ‘father.in.law-POSS.3SG-DAT/LOC’ (BaA_1930_OneEyedGirl_flk.029) points to the base form *kilin*, whereas the form *kinni-ti-gar* ‘father.in.law-POSS.3SG-DAT/LOC’ (PoKK_1964_TwoOrphanBoys_flk.200) points to the base form *kinni*. Taking this into account, Chart 169 shows the patterns in Sakha, Dolgan and Ewenki.

When it comes to siblings-in-law, one must distinguish between the siblings of spouses and the spouses of siblings since they are named differently in Dolgan. In the former case, ego’s sex plays a role since a male’s siblings-in-law are mostly named like other relatives by marriage, but a female’s siblings-in-law are named like blood relatives. Again, the named person’s sex and their relative age to their sibling are relevant, too. These parameters yield eight possible relationships, which are subsumed in Chart 170, together with the actual meaning of the terms. In the case of *küre balis* ‘male ego’s wife’s younger sibling’, the origin of *küre* is unclear, whereas *balis* literally means ‘younger sibling’ (see above).

In the case of siblings-in-law that are spouses of ego’s siblings, ego’s sex does not play any role. Only ego’s relative age to the sibling and the named person’s sex are decisive. These parameters yield four terms for eight possible relationships. Ego’s older brother’s wife is called *hanjas*, which is the same lexeme also used in Sakha, and which is used for all women older than ego related by marriage to ego. Popov (1946: 74) assumes that *hanjas* (in his orthography *sanjas*) is used exclusively for male egos. However, the corpus data show that also women use this term to refer to their older brother’s wife. The term *kinin:t* is worth discussing because of two details. On the one hand, it originally means ‘daughter-in-law’, which supposes that ego’s younger sisters-in-law are on a par

CHART 170 Kinship terms—Siblings-in-law I

	Term	Actual meaning
male ego's wife's older brother	<i>kilīn</i>	father-in-law
male ego's wife's younger brother	<i>küre balis</i>	–
male ego's wife's older sister	<i>in'e kilīn (ije kilīn)</i>	mother-in-law
male ego's wife's younger sister	<i>küre balis</i>	–
female ego's husband's older brother	<i>ehe</i>	grandfather
female ego's husband's younger brother	<i>uōl</i>	boy; son
female ego's husband's older sister	<i>ebe</i>	grandmother
female ego's husband's younger sister	<i>kis</i>	girl; daughter

CHART 171 Kinship terms—Siblings-in-law II

	Term	Actual meaning
male ego's older brother's wife	<i>hayas</i>	older relative's wife
female ego's older brother's wife	<i>hayas</i>	older relative's wife
male ego's brother's wife (younger than ego)	<i>kini:t</i>	daughter-in-law
female ego's brother's wife (younger than ego)	<i>kini:t</i>	daughter-in-law
male ego's older sister's husband	<i>kütüō</i>	older relative's husband
female ego's older sister's husband	<i>kütüō</i>	older relative's husband
male ego's younger sister's husband	<i>kütüōt</i>	son-in-law
female ego's younger sister's husband	<i>kütüōt</i>	son-in-law

with ego's daughters-in-law. On the other hand, it is explicitly stated that *kini:t* refers to the named person's relative age to ego, not to ego's relative age to their brother (Popov 1946: 73). This constraint, in turn, leads to the question of how ego's younger brother's wife is called if she is older than ego. Unfortunately, neither source consulted here could answer this question. As for male persons, ego's younger sister's husband is called *kütüōt*, which literally means 'son-in-law'. Thus, ego's younger brothers-in-law also seem to be on a par with ego's sons-in-law. Ego's older sister's husband is called *kütüō*. Parallel to *hayas*, the term is used for all men older than ego related by marriage to ego. Chart 171 summarizes these explanations.

Finally, both orphans and widow(er)s can be designated with *tula:jak* in Dolgan. The equal denomination of both types of surviving dependants appears

to be the inherited pattern and can be observed in Sakha as well. In addition, there are two borrowed items in Dolgan, which designate widow(er)s, namely *na:bun* ~ *na:mun* (< Ewenki *na:wun* ‘widow(er)’) and *ogduōba* (< Russian *vdova* ‘widow’). The latter is interestingly also used for men, though the loan origin only designates women.

- (873) *Ol d'aktar-bi-ttan ogduōba ka:l-bit-im.*
 that woman-POSS.1SG-ABL widower stay-PST2-1SG
 ‘From my wife, I stayed back as a widower.’
 (MiAI_1964_OldPeasantOldWoman_flk.081)

The takeover of Russian and Ewenki terms makes it, thus, possible to distinguish orphans from widow(er)s in Dolgan, too.

To sum up, it can be stated that the kinship terminology in Dolgan is extensively influenced by Ewenki, which can be explained by the intensive language contact of both languages. Thereby, the most frequent pattern is not borrowing, but genuinely Turkic terms have expanded or narrowed their meaning. Only a few items are directly borrowed, e.g. *amira:n* ~ *amiran* ‘stepfather’ and *na:bun* ~ *na:mun* ‘widow(er)’.

11.1.3 Body Parts

The names of body parts in Dolgan have been listed by Li (2009) in much detail. Therefore, the complete list is not repeated here, but only those terms are discussed, which exhibit peculiarities themselves and for which the INEL Dolgan Corpus shows a usage diverging from Li’s (2009) data.

Starting from the upmost parts of the body, the head can be called *bas* and *men’i*: ~ *meji*:, both items being of Turkic origin: The predecessor forms of *bas* originally denoted the head, whereas those of *men’i*: ~ *meji*:. originally denoted the brain. Whereas the Sakha cognate *meji*: has retained the original meaning ‘brain’, in Dolgan, this concept is represented by the Ewenki loanword *irge* (< Ewenki *irgə*) (Stapert 2013: 133), and Dolgan *men’i*: ~ *meji*: means ‘head’. Functionally, there appears to be no difference between *bas* and *men’i*: ~ *meji*:. According to Li (2009: 230), also *töbö* designates the head; according to Barbolina et al. (2019: 388), this is only valid for Lower Dolgan. In the material analyzed here, the term often refers to the upper surface of the head, as can be demonstrated by example (874). Given that the speaker describes a person’s size, it seems plausible that the latter pushes with his head’s crown to the wall. Additionally, it is worth mentioning that *töbö* can also refer, among other things, to the top of a tree or the tip of an animal’s tail.

- (874) *Ataq-in halbag-a, töbö-tö nöñüö-nöñüö*
 foot-POSS.3SG.GEN instep-POSS.3SG head-POSS.3SG next-next
istiēne-ge kep-pit.
 wall-DAT/LOC push-PST2.3SG
 ‘His feet and his head push against the opposite walls.’
 (ErSV_1964_WarBirdsAnimals_flk.382)

The nose is called *munnu* in Dolgan, which is the lexicalized form *mun-n-u* ‘nose-POSS.3SG.OBL’ (< *murun* ‘nose’ + -(t)I; cf. Sakha *murun*); the same lexicalization can be observed at the term *hanni* ‘shoulder’ (< *harin* ‘shoulder’ + -(t)I; cf. Sakha *sarin*). *Munnu* has extended its meaning to ‘beak’ in Dolgan, which is apparently a calque from Ewenki since both nose and beak are referred to with the same item *onokto* there (Myreeva 2004: 470; Stapert 2013: 132). Human and animal hair is distinguished from each other in Dolgan, the former being called *as*, the latter being called *tü*: (Li 2009: 239).

As for the limbs, ‘arm’ and ‘hand’, as well as ‘leg’ and ‘foot’, share a common denomination, namely *ili*: and *atak*, respectively. According to Stapert (2013: 133), the foot can be called *ulluŋ*, originally meaning ‘sole’. This pattern would again follow the Ewenki model, where *halgan* means ‘leg’ and *hagdiki*: means ‘foot; sole’. However, the corpus data analyzed here does not support this claim since *atak* appears to be regularly used for denoting feet, too, like in example (875).

- (875) [...] *bu ogo atak higinn’ak.*
 this child foot naked
 ‘[Well, where, in a warm place, apparently, look at their clothes], the child is barefoot.’
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.037)

Fingers and toes are called *čömüje*, and much more seldom *tarbak*, the latter also meaning ‘claw (of an animal)’. The single fingers have the following names (Li 2009: 247–249).

- | | |
|---------------|---|
| thumb | <i>tojon čömüje</i> (lit. ‘lord’s finger’) ~ <i>erbek</i> |
| index finger | <i>įjar čömüje</i> (lit. ‘pointing finger’) |
| middle finger | <i>ortoku: čömüje</i> (lit. ‘middle finger’) |
| ring finger | <i>a:ta huōk čömüje</i> (lit. ‘nameless finger’) |
| little finger | <i>ilgīn čömüje</i> (lit. ‘small finger’) |

As for organs, only a few items call for comment. One of them is undoubtedly *emüj* ‘female breast; nipple’. In Dolgan, the term also designates ‘milk’, which

appears to be a calque from Ewenki since *ukun* means ‘female breast; nipple’ and a derivation from it, *ukunmi*, means ‘milk’ in Ewenki (Myreeva 2004: 667–668); in Sakha, in turn, ‘milk’ is called *ūt* (Slepcev 1972: 460). Example (876) unambiguously shows the denotation ‘milk’ for *emi* in Dolgan.

- (876) *Ig-an bara:n, ibagas emij-e kel-leg-ine,*
 press-CVB.SEQ after liquid milk-POSS.3SG come-TEMP-3SG
oččogo em-ner-e:čči, [...].
 then suck-CAUS-HAB.3SG
 ‘After having pressed [the breast], when liquid milk is coming, then it [the mother] lets it suck, [when it is suckled, then this calf survives].’
 (KiMN_1975_ReindeerHerding_nar.032)

Furthermore, ‘belly’ and ‘liver’ are homonymous in Dolgan, being called *bīar*, whereas in Sakha, the former is expressed with the relational noun *is* ‘inside’ (Slepcev 1972: 154). In this case, however, no foreign model for a possible meaning extension can be observed since Ewenki *hukitā* ‘belly’ and *hakin* ‘liver’ are not homonymous. Thus, whether the Dolgan or the Sakha pattern is the original one cannot be decided. Finally, Dolgan (*h*)*ača* ‘gut; gut fat’ is a loanword from Ewenki *hača* ‘id.’ (Myreeva 2004: 548). The inherited Turkic cognate *ohogos*, which is common in Sakha, is not used in the Dolgan data analyzed here.

11.1.4 Colours

Applying the typological approaches of Berlin & Kay (1969) and Kay & Maffi (2013), there are six basic colour term concepts: black, white, red, yellow, blue and green. Dolgan has five basic colour terms to describe these concepts, whereby ‘blue’ and ‘green’ are referred to by the same term.

black	<i>kara</i> (<i>koηnomuōj</i>)
white	<i>če:lke</i> (<i>ürüj</i>)
red	<i>kihil</i>
yellow	<i>hahil</i>
blue	} <i>kūōk</i>
green	

As can be seen from the list, there are two colour terms each for the achromatic colours ‘black’ and ‘white’. In the case of ‘black’, the distinction is both functional and sociolinguistic: Whereas *kara* is used universally, *koηnomuōj* (< Ewenki *koηnomo* ‘black’) only appears in Upper Dolgan speech. From a functional perspective, the latter is only used when describing reindeer or animal

fur, like in example (877), whereas the usage of *kara* is not constrained. Additionally, *koŋnomuōj* can be used as a noun with the meaning ‘black reindeer’, like in example (878).

- (877) *Ŭs koŋnomuōj taba-la:k e-t-e ebit.*
 three black reindeer-PROPR be-PST1-3SG EVID
 ‘He had apparently three black reindeer.’
 (AkEE_19XX_BoySister_flk.114)

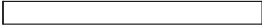













- (878) *Agis koŋnomuōj-u bat-îāk.*
 eight black.reindeer-ACC follow-IMP.1DU
 ‘Let us two follow the eight black reindeer.’
 (BoND_1964_ThreeBrothers_flk.039)

In the case of ‘white’, *če:lke* (< Ewenki *čalkə* ‘white (of hair, fur)’) is much more frequently used than *ürüŋ* (36 vs 6 tokens in the INEL Dolgan Corpus). Thereby, *ürüŋ* is used only by speakers from the Upper Dolgan area in the analyzed material. This pattern is unexpected inasmuch as *ürüŋ* is an inherited Turkic item and *če:lke* is an Ewenki loanword; since Upper Dolgan is usually more affected by Ewenki than Lower Dolgan, the reverse pattern would instead be expected. Nevertheless, an elicitation task with two speakers of Lower Dolgan (from Syndassko and Popigay) also yielded unanimously *če:lke*. Thus, it can be tentatively concluded that *če:lke* is the overall prevalent term for ‘white’, whereas *ürüŋ* is preserved as a less frequent archaism in Upper Dolgan. The continuum between black and white can be filled by various further colour terms, some of them being underived, too: *buruna* ‘off-white’, *küört* ‘grey’, *boroŋ* ‘grey’.

Coming to the chromatic colours, ‘red’ and ‘yellow’ are distinguished, being called *kihil* and *hahil*. The latter term is worth a diachronic comment since its usage for ‘yellow’ is a Dolgan innovation. Its etymological cognates, e.g. Turkish *yeşil*, mean ‘green’, whereas ‘yellow’ is referred to with, e.g. Turkish *sarı*. The latter’s cognate in Sakha *ari*: (also occurring in Lower Dolgan, attested for Novorybnoe and Popigay (Stachowski 1993a: 37)) means ‘butter’; a further derivation in Sakha *arayas* means ‘light yellow’ (Slepcev 1972: 44). As a colour term, the latter items are missing completely in Dolgan, and *hahil* took over their function. Additionally, it is worth mentioning in this context that the fox (*Vulpes vulpes*) is also called *hahil* in Dolgan. ‘Blue’ and ‘green’ are not distinguished from each other by basic colour terms in Dolgan, both being referred to with *küök*. According to Kay & Maffi’s (2013) typology, Dolgan is, thus, a type IV language, which distinguishes five out of six basic colour term con-

cepts and has a common colour term for “grue”. (Note that *grue* is used here as an artificial English equivalent to colour terms designating both ‘green’ and ‘blue’; see also Kay & Maffi 2013). In order to disambiguate ‘blue’ and ‘green’, if necessary, *kūōk* can be modified by *kalla:n* ‘sky’ and *ot* ‘grass’, respectively, yielding *kalla:n kūōge* ‘blue (lit. sky’s “grue”)’ and *ot kūōge* ‘green (lit. grasses “grue”)’ (Anna A. Barbolina, elicited). The three chromatic colour terms have also derived counterparts in Dolgan, namely *kitarkaj* ‘red’, *haharkaj* ‘yellow’ and *kögörkøj* ‘blue; green’ (Ubrjatova 1985: 130; Stachowski 1997: 46). Based on the analyzed data, no functional distinction between the basic and the derived colour terms could be found. However, the terms *kögörkøj hugun* ~ *kūōk hugun* ‘bog bilberry; blueberry’ might point to a dialectal feature since the former term was attested in Volochanka (Upper Dolgan), whereas the latter term was attested in Zhdanikha, Syndassko and Popigay (Lower Dolgan); see also Section 11.1.5.

CHART 172 Color terms (based on elicitation, Lower Dolgan)

Colour	Dolgan term	Literal meaning
	<i>če:lke:</i>	white
	<i>boron</i>	grey
	<i>kara</i>	black
	<i>tatarkaj kihil</i>	reddish gleaming red
	<i>kihil</i>	red
	<i>kagdarijbit ot hahila</i>	yellowed grasses yellow
	<i>hahil</i>	yellow
	<i>hirdik hir kūōge,</i>	light earth’s “grue”
	<i>hirdik ot kūōge</i>	light grasses “grue”
	<i>hir kūōge,</i>	earth’s “grue”
	<i>ot kūōge</i>	grasses “grue”
	<i>hirdik kalla:n kūōge</i>	light sky’s “grue”
	<i>kalla:n kūōge</i>	sky’s “grue”
	<i>hir hahila</i>	earth’s red

An elicitation task (Anna A. Barbolina, Lower Dolgan) yielded the colour terms presented in Chart 172. As can be seen, the informant strived to differentiate the colours as best as possible, wherefore the primary term *kūōk* does not appear. She, however, explained that in relevant contexts, e.g. *kūōk ot* ‘green grass’ or *kūōk u:* ‘blue water’, further modification is not needed for disambig-

uation. The terms designating ‘scarlet red’, ‘orange’, ‘brown’, ‘light green’ and ‘light blue’ are, moreover, composed: *tatarkaj kihil* ‘scarlet red’ literally means ‘reddish gleaming red’, *kagdarijbit ot hahila* ‘orange’ means ‘the yellow of yellowed grass’, and *hir hahila* ‘brown’ means ‘the red of the earth’. In the case of ‘light green’ and ‘light blue’, the adjective *hirdik* ‘bright; light’ is included in the term.

Colourful items are described as *čūōgur* ~ *ču:gur* or *öjnök*, whereby the former item also means ‘motley’ or ‘piebald’ when applied to reindeer. The latter concept can also be expressed with *bugdi*: ‘spotted; dappled’ being a loanword from Ewenki *bugdī* ‘id.’.

Golden, silver and coppery items are described according to the given metal. Thereby, some meaning shifts from Pre-Dolgan-Sakha to Dolgan have taken place. Copper and coppery items are called *altan* in Dolgan, which has the original meaning ‘gold’ (e.g. Turkish *altın* ‘gold’). Silver and silver items are most frequently called *kömüs* in Dolgan, which is the diachronically expected usage. Still, according to the analyzed corpus data, *kömüs* is also used for gold and golden items. Hence, the bare term *kömüs* is ambiguous in Dolgan and can only be disambiguated by the context or the speech situation, if at all. In example (879), the first reading is intended (as indicated in the corpus by the original speaker’s translation), but the second reading would be equally plausible and accessible.

- (879) *Oŋor-uy kömüs ilim-ne, kömüs tī-ta,*
 make-IMP.2PL **silver/gold** net-PART **silver/gold** small.boat-PART
kömüs erdi-te.
silver/gold oar-PART
 ‘Make golden nets, a small golden boat and golden oars.’ ~
 ‘Make silver nets, a small silver boat and silver oars.’
 (ChPK_1970_ThreeBoys_flk.020)

In order to disambiguate these readings, the terms *kihil kömüs* ‘gold, golden; lit. reddish silver’ (880) and—much more seldom—*ürüŋ kömüs* ‘silver; lit. white silver’ (881) are used in Dolgan.

- (880) *Kihil kömüs d’iē-ni kör-büt, [...].*
red silver/gold house-ACC see-PST2.3SG
 ‘He saw a golden house, [the whole earth around it was shining].’
 (ErSV_1964_WarBirdsAnimals_flk.277)

- (881) *Ürüy kömüh-ü-nen ha:kt-ir kūōska-gin*
 white silver/gold-EP-INS defecate-PTCP.PRS cat-POSS.2SG.ACC
bîer-beteg-iŋ.
 give-NEG.PST2-2SG
 'You didn't give the cat that defecates silver.'
 (ErSV_1964_WarBirdsAnimals_flk.441)

11.1.5 *Fauna and Flora*

The territory inhabited by Dolgans is dominated by Arctic and forest tundra, which is rather hostile to life for both animals and plants. Therefore, the number of denominations for animals and plants actively used in Dolgan speech is relatively small. Nevertheless, there are terms of animals and plants not being resident on the Taimyr Peninsula in Dolgan as well. In this case, Russian loans (e.g. *sluōn* 'elephant' < *slon* 'id.' or *begemūōt* 'hippo' < *begemot* 'id.'), inherited Turkic terms (*baga* 'frog', cf. Sakha *baya* 'id.') or older Mongolic loans (e.g. *kakaj* 'lion'; available in Sakha as *xaxaj* 'id.') can be used. The latter two appear unexpected at first glance but are understandable given the Central Asian origin and relatively recent (13th to 16th/17th centuries) migration of the Pre-Dolgan-Sakha population. Here, however, I will focus on the flora and fauna indigenous to the Taimyr Peninsula and some domestic animals, which appear in farming in the Russian Federation.

Wild animals, in general, are referred to by the term *kî:l*, which originally means 'wild reindeer' and is, thus, a hyperonym. This pars-pro-toto denomination can probably be explained by the fact that the wild reindeer is the most important wild animal for the Dolgans. Male quadruped animals, as well as male birds, are called *irgek*; in the case of their female counterparts, a complex noun phrase is formed with *tîhi* 'female (reindeer)' as the second part, e.g. *at tîhi-ta* 'horse female-POSS.3SG' = 'mare'. Not fully grown animals are referred to similarly with *ogo* 'child', e.g. *at ogo-to* 'horse child-POSS.3SG' = 'foal'.

As for mammals, Dolgans distinguish between wild reindeer (*kî:l*) and domesticated reindeer (*taba*); the latter is dealt with separately in Section 11.1.9. The two most prominent predators on the Taimyr Peninsula, the brown bear (*Ursus arctos*) and the wolf (*Canis lupus*), can be referred to with taboo expressions. For the brown bear, *ebeke*: ~ *ebeke* (lit. 'grandmother') and *ehe* (lit. 'grandfather') are used. The wolf—besides the actual term *börö*—is also called *kuturuk*, literally meaning 'tail', which is apparently due to Ewenki influence since the wolf is called *irgiči* 'with tail; tailed one' in Ewenki (Myreeva 2004: 253). Generally, it is striking that many terms for mammals are not inherited in Dolgan, but loans from mostly Ewenki, and more seldom from Russian. The terms *tibda* 'otter' and *tibde* 'lynx' deserve a short discussion: Both go back to

Ewenki *tibd'aki*: ~ *tīwd'aki*: 'lynx' (Vasilevič 1958: 406), whereby either of the Dolgan equivalents handles vowel harmony differently. As for the meaning, the front-vocalic item *tibde* appears to designate the lynx (Stachowski 1993a: 222), and the back-vocalic item *tibda* seems to designate the otter (Ubrjatova 1985: 64; Bel'tjukova & Koševerova 1987: 78). Finally, in many cases, parallel forms exhibit a different provenance. Chart 173 lists the Dolgan terms for the most common mammals together with indications on the origin of the given term.

In the case of domestic animals, the Dolgan terms reflect the traditional way of life. The most important domestic animal, i.e. the reindeer, is called *taba*. In contrast to most other terms connected to reindeer herding (see Section 11.1.9), this term is of Turkic origin (cognate with, e.g. Turkish *deve* 'camel'). Additionally, there are inherited terms for 'horse' (*at*) and 'dog' (*it*; cf. also *ünüges* 'puppy'), which is not surprising since Turkic people are known to have had both. Other domestic animals do not play a role in the traditional Dolgan way of life. Consequently, Russian loanwords are used for them: *hibinn'e* 'pig' (< Russian *svin'ja*), *koruōba* 'cow' (< Russian *korova*), *kūōska* 'cat' (< Russian *koška*) and *kurisa* 'chicken' (< Russian *kurica*).

As for birds, there are two hyperonyms in Dolgan: *kötör* (lexicalized from *köt-ör* 'fly-PTCP.PRS' = 'flying one') designates all kinds of birds, and *čī:čā:k* designates small birds. Only a few birds are sedentary on the Taimyr Peninsula; most birds are migratory, breeding in summer on the Taimyr Peninsula and passing the winter further southwards. The only sedentary birds in the Arctic tundra are several kinds of seagulls (*kulu:k* ~ *čā:jka*; family: Laridae) and partly the snow owl (*lenkej*; *Bubo scandiacus*), although the latter also migrates, depending on the availability of prey. In the forest tundra and at the northern edge of the taiga, there are a few more sedentary birds. Chart 174 lists the Dolgan terms for birds sedentary on the Taimyr Peninsula. As can be seen, most terms are loans from either Ewenki or Russian.

However, the majority of birds appearing on the Taimyr Peninsula is migratory. Big groups make up ducks (*kus*; family: Anatidae), geese (*ka:s*; family: Anserinae), loons (*kūōgas*; family: Gaviidae), sandpipers or snipes (*kuma:r tühere:čči* ~ *u: karba:čči*; family: Scolopacidae) and some raptors. The hyperonyms for the former three groups are inherited Turkic items in Dolgan. The hyperonym for sandpipers or snipes is depictive, literally meaning 'dropping mosquitos' and 'water swimming', respectively. Raptors lack a hyperonym. Chart 175 lists the Dolgan terms for the most important migratory birds breeding on the Taimyr Peninsula. As can be seen in the list, the origin of the terms—if known at all—is much more balanced than in the case of sedentary birds.

CHART 173 Dolgan terms for wild mammals

Animal	Dolgan term	Origin (if known)
Predators		
brown bear (<i>Ursus arctos</i>)	<i>ebeke</i> : ~ <i>ebeke</i> <i>ehe</i>	taboo expression, lit. 'grandmother' taboo expression, lit. 'grandfather'
ermine (<i>Mustela erminea</i>)	<i>gornuōk</i> ~ <i>goronuōk</i>	< Russian, possibly an amalgamation of <i>gornostaj</i> 'ermine' and <i>kolonok</i> 'Siberian weasel'
Eurasian otter (<i>Lutra lutra</i>)	<i>d'ukun</i> <i>tibda</i>	< Ewenki <i>d'u:kun</i> 'id.' < Ewenki <i>tibd'aki</i> : ~ <i>tiwd'aki</i> : 'lynx'
fox (<i>Vulpes vulpes</i>)	<i>hahil</i>	inherited, lit. 'yellow' (see Section 11.1.4)
lynx (<i>Felis lynx</i>)	<i>tibde</i>	< Ewenki <i>tibd'aki</i> : ~ <i>tiwd'aki</i> : 'id.'
polar bear (<i>Ursus maritimus</i>)	<i>če:lke</i> : <i>ebeke</i> :	'white' + 'bear'
polar fox (<i>Vulpes lagopus</i>)	<i>kīrsa</i>	inherited
sable (<i>Martes zibellina</i>)	<i>kī:s</i>	inherited
wolf (<i>Canis lupus</i>)	<i>bōrō</i> <i>kuturuk</i>	inherited taboo expression, lit. 'tail'
wolverine (<i>Gulo gulo</i>)	<i>hiēgen</i>	inherited
Other mammals		
hare (family: <i>Lepus</i>)	<i>kūōbak</i> <i>uska:n</i>	inherited < local Russian <i>uškan</i> 'id.'
moose (<i>Alces alces</i>)	<i>tan'ak</i> <i>to:ki</i> : ~ <i>tūōki</i> :	lit. 'crook; rod' < Ewenki <i>to:ki</i> : 'id.'
mouse (family: <i>Mus</i>)	<i>kutujak</i>	inherited
lemming (<i>Lemmus sibiricus</i>)	<i>kutujak</i>	inherited
squirrel (<i>Sciurus vulgaris</i>)	<i>tī:ŋ</i>	inherited
wild reindeer (<i>Rangifer tarandus</i>)	<i>kī:l</i>	inherited

CHART 174 Dolgan terms for sedentary birds

Bird	Dolgan term	Origin (if known)
boreal owl (<i>Aegolius funereus</i>)	<i>kim ila:čči</i>	lit. ‘taking spark(s)’
capercaillie (<i>Tetrao urogallus</i>)	<i>horoki</i>	< Ewenki <i>horoki</i> : ‘id.’
crow (family: <i>Corvidae</i>)	<i>homka</i>	< Ewenki <i>hu:mkə</i> ‘big owl; eagle owl’
cuckoo (<i>Cuculus canorus</i>)	<i>kukti</i>	< Ewenki <i>kukti</i> ‘id.’
eagle (family: <i>Accipitridae</i>)	<i>örüöl</i>	< Russian <i>orël</i> ‘id.’
partridge (<i>Perdix perdix</i>)	<i>kabiēka:n ~ kabijaka:n</i> <i>kurpa:ski</i>	< Ewenki <i>kawəka:n</i> ‘id.’ ^a < Russian <i>kuropatka</i> ‘id.’ ^b
raven (family: <i>Corvidae</i>)	<i>huōr</i>	inherited
seagull (family: <i>Laridae</i>)	<i>kulu:k</i> <i>ča:jka</i>	< Ewenki <i>kuluk</i> ‘id.’ < Russian <i>čajka</i> ‘id.’
Siberian jay (<i>Perisoreus infaustus</i>)	<i>hoksa:ki:</i> <i>kuka:ki:</i>	< Ewenki <i>haksa</i> ‘snipe’ < Ewenki <i>ku:kə:ki:</i> ‘jay’
snow owl (<i>Bubo scandiacus</i>)	<i>lenkej</i>	inherited

- a A short note is in order here: Although *kawəka:n* is attested for Ewenki, it is remarkable that in Taimyr and Ilimpi Ewenki—which are most relevant for Dolgan-Ewenki contact—rather the term *helaki:* is used for ‘partridge’ (cf. Däbritz & Gusev 2021).
- b The complete Russian term for *Perdix perdix* is *seraja kuropatka* ‘lit. grey partridge’.

CHART 175 Dolgan terms for migratory birds

Bird	Dolgan term	Origin (if known)
Arctic tern (<i>Sterna paradisaea</i>)	<i>čika:ki:</i>	
Baikal teal (<i>Sibirionetta Formosa</i>)	<i>ɲuruk ~ muruk</i>	
common crane (<i>Grus grus</i>)	<i>turuja</i>	inherited

CHART 175 Dolgan terms for migratory birds (*cont.*)

Bird	Dolgan term	Origin (if known)
lesser white-fronted goose (<i>Anser erythropus</i>)	<i>lagli</i>	< Ewenki <i>lagulək</i> 'small goose'
long-tailed jaeger (<i>Stercorarius longicaudus</i>)	<i>tira:ki:</i>	< Ewenki <i>tiraki:</i> 'id.'
Northern goshawk (<i>Accipiter gentilis</i>)	<i>ki:rt</i>	inherited
rock ptarmigan (<i>Lagopus muta</i>)	<i>kurpa:ski</i>	< Russian <i>kuropatka</i> 'partridge' ^a
rough-legged buzzard (<i>Buteo lagopus</i>)	<i>har</i>	
ruff (<i>Philomachus pugnax</i>)	<i>höksö:k</i>	
tundra swan (<i>Cygnus bewickii</i>)	<i>kuba</i>	inherited
white wagtail (<i>Motacilla alba</i>)	<i>hilgipčā:n</i> <i>hiāmsak</i> <i>hiā hiēčči</i>	lit. 'fat-lover' lit. 'eating fat'
willow ptarmigan (<i>Lagopus lagopus</i>)	<i>i:redi:</i> <i>karbaki:</i> <i>mūōra tira:ki:ta</i>	< Ewenki <i>i:rədi:</i> < Ewenki <i>karbuki:</i> 'diving duck' 'Northern' + <i>tira:ki:</i>

- a The rock ptarmigan—unlike the partridge—belongs to the tribe of true pheasants (Phasianini) and not to the tribe of grouses (Tetraonini). Nevertheless, it is called *tundrjanaja kuropatka* 'Tundra partridge' in Russian, which is the reason that the corresponding loan in Dolgan *kurpa:ski* refers to both the rock ptarmigan and the partridge, too.

Coming to fish, the hyperonym used for this group is *balik*, which is of Turkic origin. There are many freshwater and saltwater fish species on the Taimyr Peninsula; Chart 176 lists only a handful of them. Many terms used are inherited and occur in Sakha, too, but several Russian and Ewenki loanwords are also used.

There are no reptiles and amphibians on the Taimyr Peninsula, and, thus, Dolgan has no terms designating them. As for arthropods, there are spiders (class: Arachnida) and insects (class: Insecta) on the Taimyr Peninsula. Spiders are called *ataki:* ~ *ata:ki:* (< Ewenki *ataki:* 'id.') in Dolgan, whereas insects, in general, are called *ūōn* and *kurd'aga* (both inherited). The latter two terms and

CHART 176 Dolgan terms for fishes

Fish	Dolgan term	Origin (if known)
Arctic grayling (<i>Thymallus Arcticus</i>)	<i>d'arga:</i>	inherited
Arctic whitefish (<i>Coregonus pidschian</i>)	<i>man'agas</i> ~ <i>majagas</i>	inherited
broad whitefish (<i>Coregonus nasus</i>)	<i>muḡur</i> <i>ustugas</i>	inherited lexicalized from <i>ustu-gas</i> 'flow-ADJZ' < Russian <i>čir</i> 'id.'
burbot (<i>Lota lota</i>)	<i>čir</i> <i>hi̇alahar</i> <i>hi̇aḡan</i>	inherited < Ewenki <i>he:ḡa:n</i> 'id.'
peled (<i>Coregonus peled</i>)	<i>ü:kü</i> <i>pele:tke</i>	< Russian <i>peljad</i> 'id.'
perch (<i>Perca fluviatilis</i>)	<i>aligar</i> ~ <i>alihar</i>	inherited
pike (<i>Esox lucius</i>)	<i>hordoḡ</i> <i>kūōka</i>	inherited
roach (<i>Rutilus rutilus</i>)	<i>n'iča:</i>	< Ewenki <i>n'iča</i>
sheefish; nelma (<i>Stenodus nelma</i>)	<i>böli̇ōk</i>	
Siberian roach (<i>Rutilus rutilus lacustris</i>)	<i>pulban</i>	< Ewenki <i>pulwa:nə</i> 'ide; roach'
Siberian sturgeon (<i>Acipenser baerii</i>)	<i>kati:s</i>	inherited
Siberian whitefish (<i>Coregonus muksun</i>)	<i>muksu:n</i>	< Russian <i>muksun</i> 'id.'
trout (<i>Salmo trutta</i>)	<i>ku:ḡsa</i> ~ <i>ku:msa</i> <i>n'ūōra</i>	< Russian <i>kunža</i> 'id.' < Ewenki <i>n'ōra</i> 'id.'

CHART 177 Dolgan terms for insects

Insect	Dolgan term	Origin (if known)
ant (family: Formicidae)	<i>hirikte</i>	< Ewenki <i>iriktə</i> 'id.'
bee (family: Anthophila)	<i>ijirîâ</i>	inherited
beetle (order: Coleoptera)	<i>koŋgurdûôs ~ koŋurdûôs</i>	inherited
blackfly (family: Simuliidae)	<i>hünmükte</i> <i>kirada:j</i>	< Ewenki <i>hinmiktə</i> 'id.'
botfly (family: Oestridae)	<i>kü:lemen ~ güleme:n</i>	inherited
butterfly (order: Lepidoptera)	<i>lörüô</i>	< Ewenki <i>läre:do</i> 'id.'
dragonfly (family: Odonata)	<i>gidalu:n</i>	< Ewenki <i>gidalu</i> 'id.'
fly (family: Muscidae)	<i>haksirga</i>	inherited
mosquito (family: Culicidae)	<i>birdak</i> <i>kuma:r</i>	inherited < Russian <i>komar</i> 'id.'
reindeer botfly (<i>Cephenemyia trompe</i>)	<i>irgakta</i>	< Ewenki <i>irgakta</i> 'id.'
reindeer botfly's larva	<i>künükte ~ kün'ükte</i>	< Ewenki <i>kujakta</i> 'id.'
wasp (family: Vespinae)	<i>dübükte ~ d'übükte</i> <i>ijirîâ</i>	< Ewenki <i>d'uwuktə</i> 'id.' 'wasp; bee' inherited

kulikan (< Ewenki *kuli:ka:n*) designate also worms. Chart 177 lists the Dolgan terms for some families and orders within the insect class. As for mosquitos, it has to be noticed that *kuma:r* (< Russian *komar* 'id.') is much more frequent than the inherited term *birdak*.

Standing between animals and plants, there are mushrooms (Fungi), which are called *kuna:k* (inherited) or *dögömöktö* (< Ewenki *dəginmäktə* 'id.'). Lichens are closely related and very important in the Arctic tundra since they serve as food for both wild and domestic reindeer. The reindeer lichen (*Cladonia rangiferina*) is called *ahilik* (inherited; historically meaning 'food') and *labikta ~ labukta* (< Ewenki *lawukta* 'id.').

CHART 178 Dolgan terms for plants

Plant	Dolgan term	Origin (if known)
Trees		
aspen (<i>Populus tremula</i>)	<i>osina</i>	< Russian <i>osina</i> 'id.'
birch (family: <i>Betula</i>)	<i>katij</i>	inherited
cedar (family: <i>Cedrus</i>)	<i>kedr</i>	< Russian <i>kedr</i> 'id.'
dog rose (<i>Rosa canina</i>)	<i>dölühüön ~ dölühö:n</i>	inherited
dwarf birch (<i>Betula nana</i>)	<i>üöktala</i>	< Ewenki <i>o:ktag</i> 'id.'
juniper (family: <i>Juniperus</i>)	<i>heŋkire</i>	< Ewenki <i>həŋkərə</i> 'id.'
larch (family: <i>Larix</i>)	<i>tit</i>	< Samoyedic; see Section 11.2.1.4
pine (family: <i>Pinoideae</i>)	<i>sosna</i>	< Russian <i>sosna</i> 'id.'
rowan tree (<i>Sorbus aucuparia</i>)	<i>r'abina</i>	< Russian <i>rjabina</i> 'id.'
spruce (<i>Picea obovate</i>)	<i>jel'</i>	< Russian <i>el'</i> 'id.'
Other plants		
bog-rosemary (<i>Andromeda polifolia</i>)	<i>heppere:k</i>	inherited
hare's-tail cottongrass (<i>Eriophorum vaginatum</i>)	<i>kîä</i>	inherited
horsetail (<i>Equisetum arvense</i>)	<i>ečiki ot</i>	
moss (division: <i>Bryophyta</i>)	<i>köppök</i>	inherited
willow bush (family: <i>Salix</i>)	<i>talak</i>	inherited

CHART 179 Dolgan terms for berries

Berry	Dolgan term	Origin (if known)
black crowberry (<i>Empetrum nigrum</i>)	<i>kara hugun</i>	'black' + 'berry'
	<i>ki:s ahi:liga</i>	'sable's berry'
	<i>čiča:k huguna</i>	'(small) bird's berry'
bog bilberry/blueberry (<i>Vaccinium uliginosum</i>)	<i>hugun</i> (Norilsk variety)	inherited
	<i>kögörköj hugun</i> (Voločanka variety)	'blue' + 'berry'
	<i>kūōk hugun</i> (Zhdanikha, Syndassko, Popigay varieties)	'blue' + 'berry'
cloudberry (<i>Rubus chamaemorus</i>)	<i>bolgikta</i>	< Ewenki <i>bolgikta</i> 'some kind of bush'
	<i>moro:sko</i>	< Russian <i>moroška</i> 'id.'
lingonberry (<i>Vaccinium vitis-idaea</i>)	<i>kihil ahilik</i> (Norilsk variety)	'red' + 'berry'
	<i>kihil hugun</i> (not in Norilsk variety)	'red' + 'berry'
	<i>himikte</i>	< Ewenki <i>hi:mikta</i> 'id.'
	<i>oton</i>	inherited
red currant (<i>Ribes rubrum</i>)	<i>kaptagas</i>	inherited
	<i>igilikte</i>	< Ewenki <i>igəlikta</i> 'id.'

Plants, in general, are referred to by the term *ot* or its plural form *ottor*, which also means 'grass' and 'flower'. In Lower Dolgan, especially in Popigay, the term *ū:ne:ji* is also used. Trees, as well as taiga-like forest and wood, are called *mas*; their leaves are named *hebirdek*. Bushes, in turn, are called *talak*, which also designates willow bushes (family: *Salix*).

As for fruits and vegetables, only berries are indigenous on the Taimyr Peninsula. Consequently, they constitute an essential source of vitamins for the indigenous population. In Dolgan, berries as a whole are called *ahilik* ~ *ahi:lik* and *hugun*. Still, according to Stachowski (1993a: 111), the latter term was not used as a hyperonym by Norilsk Dolgans but meant 'bog bilberry/blueberry' (*Vaccinium uliginosum*) in this variety.

11.1.6 *Celestial Bodies and Weather*

The denomination of celestial bodies and weather phenomena is tightly intertwined. Since the former often form the base for the latter, they are discussed together here. The sky itself is generally called *kalla:n*, implying the concrete

denotation of the actual sky (882). More seldom, the term *taɲara* is used, but this term always has an abstract and mythological connotation (883) and has additionally extended its meaning to designate God (884).

- (882) *Sulus-tar kalla:ɲ-ɲa köst-öl-lör.*
 star-PL sky-DAT/LOC be.visible-PRS-3PL
 ‘The stars are visible in the sky.’
 (UkET_AkEE_19940424_SongsTales_conv.UkET.118)
- (883) *Bilir hir taɲara üösk-ür-ün hagina, [...].*
 long.ago earth sky arise-PTCP.PRS-POSS.3SG.GEN when
 ‘Long ago, when earth and sky arose, [all could speak, it is said, all animals].’
 (UkET_2002_FoxJayBuzzard_flk.004)
- (884) [...] *kel-e ilig-ine taɲara ira:ɰta:gi-ta.*
 come-CVB.SIM not.yet-3SG sky czar-POSS.3SG
 ‘[I say to you, I will not drink any wine], as long as the Holy Father has not come.’
 (PoNA_19940110_LastSupper_transl.018)

Metaphorically, *kalla:n* also means ‘weather’, whereby a process of abstraction can be observed: In example (882), the speaker talks about the concrete and visible sky. In example (885), a sensual expression is linked to the term, which still yields the connotation of a concrete referent around the speaker. But in example (886), the speaker talks about the weather as an abstract concept. Additionally, it sparks the eye that in the latter two cases, the first-person plural possessive suffix appears at *kalla:n*. Given the low number of relevant tokens in the analyzed material, it cannot be finally answered whether *kalla:mmit* may be interpreted as lexicalized form already. However, since also *kümmüt* (< *kün* ‘sun’ + -BIt ‘POSS.1PL’) is attested for the meaning ‘weather’ (Stachowski 1993a: 164), it seems plausible that *kalla:mmit* may adhere to the same pattern.

- (885) *Kör-ö-güt duō kalla:m-mit timnij-d-a?*
 see-PRS-2PL Q sky-POSS.1PL get.cold-PST1-3SG
 ‘Do you see that the weather [lit. sky] is getting colder?’
 (PoNA_2004_SnowOwl_flk.014)

- (886) *Kata buō kalla:m-mit kuhagan, men'aj-dem-mit.*
 just EMPH sky-POSS.1PL bad change-VBZ-PST2.3SG
 'Just now, the weather is bad, it changed.'
 (KiPP_2009_Story_nar.KiPP.027)

The sun is called *kün*, and the sunbeams are called *kün biāta*, literally meaning 'sun string'. Sunshine is expressed with the verb *tik-* 'shine', sunrise and sunset are described with the verbs *tagis-* 'go out' and *tüs-* 'fall'. In either case, *kün* 'sun' is the subject in the clause, and the verbs appear in the third person singular in predicate position, like in example (887). The adjectives 'sunny' and 'sunless' are formed with the propriative suffix -LA:K and the negative existential noun *huōk*, yielding the forms *künne:k* 'sunny' and *küne huōk* 'sunless; dull; cloudy'.

- (887) *Ūör-er, ūör-er, kün, kün tig-ar.*
 be.happy-PRS.3SG be.happy-PRS.3SG sun shine-PRS.3SG
 'He is happy, the sun, the sun is shining.'
 (UoPP_ChGS_20170724_SocCogRetell_nar.UoPP.030)

The Earth is called *hir*, whereby this term is polysemous, also meaning 'land', 'place' and 'ground'. As for other planets, only a term for Venus is attested, namely *čolbon* (Stachowski 1998: 70; Anna A. Barbolina p.c.). The moon is called *ij*, and the moonlight is named *ijdiŋa*. The latter can also be used metaphorically for 'full moon', otherwise a compound term, *ij tūōl-u-ta* 'moon fill-NMLZ-POSS.3SG' = 'lit. moon's fullness', is used. Analogously, 'new moon' is called *ij haŋa-ta* 'moon new-POSS.3SG' = 'lit. moon's newness'. Coming to stars, the hyperonym is *hulus* 'star'. Terms for single stars or constellations are sparsely attested: Only *mūōra hulus* 'lit. Northern star ~ tundra star' for the Pole Star, *araŋas sulus*⁸ 'lit. granary star' for the Ursa Major and *ürgel hulus* for the Pleiades could be found, whereby the literal meaning of *ürgel* is unknown. Finally, the latter term is also used as a pars-pro-toto term for the Milky Way.

Weather phenomena such as rain, fog and the like themselves are mostly referred to with nouns in Dolgan. Most terms are straightforward and do not exhibit any peculiarities. However, as shown in Chart 180, some comments are necessary. The items *purga*: 'snowstorm' and *hobūōj* 'snowdrift' are borrowings from different Russian varieties, which is inasmuch astonishing as snow and related phenomena are so prevailing on the Taimyr Peninsula that inherited

8 The term is named by Stachowski (1998: 32) in this form, i.e. with initial s- instead of expected h-, which might be due to idiolectal sandhi in the given case.

CHART 180 Dolgan terms for weather phenomena

Phenomenon	Dolgan term	Note
sun	<i>kün</i>	also means ‘day’
dawn, red sky	<i>tij</i>	
cloud	<i>bilit</i>	
rain	<i>hamir</i>	
rainbow	<i>kustuk</i>	
snow, snowflake	<i>kar</i>	
hail	<i>būona</i>	< Ewenki <i>bo:na</i> ‘id.’
hailstone	<i>tolot</i>	
fog	<i>tuman</i>	cf. Russian <i>tuman</i> ‘id.’ ^a
rime	<i>kiria</i>	
night dew	<i>tün hik</i>	
air	<i>halgin</i>	
wind	<i>tial</i>	
strong wind, whirlwind	<i>boloho</i>	
snowstorm	<i>purga:</i> <i>tibi:</i>	< Russian <i>purga</i> ‘id.’ <i>tip-</i> ‘flurry’ + <i>-I:</i> ‘NMLZ’
snowdrift	<i>hobūoj</i>	< dialectal Russian <i>suvoj</i> ‘id.’
thunder, thunderstorm	<i>etij</i>	
lightning	<i>etij ūōta</i> <i>gilbes</i>	‘thunder’ + ‘fire’
aurora borealis	<i>elden</i> <i>d’ūke:bil ūōta</i>	Lower Dolgan (Stachowski 1998: 42) ‘Yukaghir’ + ‘fire’; Upper Dolgan (Stachowski 1998: 90)

- a Note that *tuman* ‘fog’ is inherited in Dolgan and no loanword from Russian; instead Russian borrowed the item from a Turkic variety (Fasmer 1987b [1958]: 119).

words would be expected. In the case of ‘snowstorm’, there is the parallel term *tibi:* (nominalization of *tip-* ‘flurry’), but in the case of ‘snowdrift’, no such parallel term could be found. Finally, the aurora borealis is called *elden* in Lower Dolgan, but allegedly, *d’ūke:bil ūōta* ‘Yukaghir’s fire’ is used in Upper Dolgan as well (Stachowski 1998: 42, 90). However, the analyzed corpus material does not contain any of the terms named. Besides that, the latter term appears to be biased by Sakha to the extent that Sakha uses precisely the same term, and Sakha—in contrast to Dolgan—has contacts with Yukaghir. In Sakha itself, the term is a calque from Kolyma Yukaghir *odul-ločil* ‘Yukaghir fire’ (Nikolaeva

2006: 458). Therefore, this term should be handled with care. Chart 180 lists all terms for weather phenomena detected in both the analyzed corpus material and relevant lexical sources.

If the given weather phenomena appear in the predicate position in the clause, different strategies apply. In the case of rain, the noun *hami:r* ‘rain’ can be mechanically verbalized, yielding the verb *hami:rda:-* ‘rain’ (888). Besides that, also the dummy verb *tüs-* ‘fall’ (see also Section 8.1.1 and Malchukov & Ogama 2011) can be used for all kinds of rainfall ((889) and (890)). For thunder and thunderstorms, the dummy verb *et-* ‘speak’ is used (891).

- (888) *Kihin hami:r-da:-bit, [...]*.

in.winter rain-VBZ-PST2.3SG

‘In winter it rained, [the whole snow turned to ice].’

(ErSV_1964_WarPartridgesPikes_flk.003)

- (889) [...] *hami:r tüs-püt du, tuök du:?*

rain fall-PST2.3SG Q what Q

‘[Did the edge of the chum drip], did it rain, or what?’

(UkET_19940424_OldWomanTaal_flk.004)

- (890) *Kihinin, ka:r tüs-teg-ine, [...]*.

in.winter snow fall-TEMP-3SG

‘In winter, when snow was falling, [the bird used to fly to a warm place].’

(ErSV_1964_WarBirdsAnimals_flk.002)

- (891) [...] *etiñ et-er-in kördük kalla:ŋ-ŋa*

thunder speak-PTCP.PRS-POSS.3SG.GEN like sky-DAT/LOC

a:jdɑ:n buöl-but.

noise become-PST2.3SG

‘[It was not long], then a noise was sounding in the sky as if it was thundering.’

(PoNA_19900810_Tojo00Airplane_nar.012)

For attributive descriptions of the weather and the temperature, no noteworthy patterns can be observed. Adjectives can be either underived like *bürkük* ‘murky; foggy’ or derived from the nouns listed in Chart 180 like *bilitta:k* ‘cloudy’ (< *bilit* ‘cloud’). Chart 181 lists the Dolgan attributes for weather phenomena available in the analyzed material.

CHART 181 Dolgan attributes for weather phenomena

Dolgan term	Description	Note
Weather		
<i>bürkük</i>	murky, foggy	
<i>bilita huōk</i>	fair, cloudless	<i>bilit</i> 'cloud' + -(t)A 'POSS' + NEG.EX
<i>bilitta:k</i>	cloudy	<i>bilit</i> 'cloud' + -LA:K 'PROPR'
<i>čumpu</i>	calm, lull	
<i>d'eŋke</i>	clear, fair	
<i>kura:nak</i>	dry	
<i>küne huōk</i>	murky, cloudy	<i>kün</i> 'sun' + -(t)A 'POSS' + NEG.EX
<i>tīalla:k</i>	windy	<i>tīal</i> 'wind' + -LA:K 'PROPR'
Temperature		
<i>timni:</i>	cold	both noun and adjective
<i>hörü:n</i>	enjoyably cool	
<i>ičiges</i>	warm	
<i>iti:</i>	warm, hot	both noun and adjective

11.1.7 Spatial Orientation and Cardinal Directions

The expression of spatial orientation can be established both deictically and referentially, both being touched upon in this section. First, some functional aspects of local deixis (demonstratives, deictic directions) are discussed and afterwards, referential devices for the expression of spatial orientation (landmarks, cardinal directions) are described.

As shown in Section 3.3.2.3, local deixis in Dolgan is organized in a threefold distance-oriented system, the demonstrative pronouns being as follows: *bu* 'this (here)' vs *iti* 'this (there)' vs *ol* 'that'. The correlating demonstrative adverbs expressing both the location and the goal of movement are *manna* ~ *munna* ~ *bunna* 'here, hither (at/to the speaker)', *itinne* 'here, hither (a bit further)' and *onno* 'there, thither'. The demonstrative adverbs expressing the source of movement are *mantan* ~ *muntan* 'from here (at the speaker)', *itinten* 'from here (a bit further)' and *onton* 'from there'. The first-named proximal items are used when the speaker points to place immediately in their vicinity. Given different contexts and, thus, different frames of reference, the immediateness can change, too. In example (892), the speaker calls her son to come to her, i.e. to her immediate vicinity. In example (893), in turn, the speaker refers with *manna* even to the whole Taimyr Peninsula, since she is there now and contrasts it to the Republic of Sakha in the given context.

- (892) *Mijatu, kel manna!*
 Mijatu come.IMP.2SG **hither**
 'Mijatu, come here!'
 (AsKS_19XX_Amulet_nar.176)
- (893) *Manna gin-a-gin, Tajmī:r-ga gin-a-gin?*
here make-PRS-2SG Taimyr-DAT/LOC make-PRS-2SG
 'Do you mean here, do you mean on Taimyr?'⁹
 (ZhNA_KuNS_20XX_LifeAndMusic_conv.KuNS.003)

The items *onno* and *onton* fulfil the opposite function since they refer to places far from the speaker. Again the frame of reference may differ regarding its dimension. In example (894), the speaker refers to the last day's camp of nomadizing, whereas in example (895), the speaker refers to the settlement of Tura, located several hundred kilometres away.

- (894) *Kirdik da, onno hu:r-ka ka:l-bit būolla.*
 truth EMPH **there** temporary.camp-DAT/LOC stay-PST.3SG MOD
 'Indeed it seems that it [= a reindeer] has stayed there, at the other station.'
 (KiMN_1975_ReindeerHerding_nar.085)
- (895) *Vassa kim Tura-ga ba:r e-t-e, onno ogo*
 Vassa where.PH Tura-DAT/LOC EX be-PST1-3SG **there** child
törö:-büt-e, [...].
 give.birth-PST2-3SG
 'Vassa was in Tura, there she gave birth to a child, [his name is Egorka, her own name is Vassa].'
 (KuSE_2009_Family_nar.KuSE.013)

The items *itinne* and *itinten*, which are much less frequent from a quantitative point of view, take an intermediate position in this respect. They point to a place, which is contrasted to the speaker's vicinity, but still relatively close in the given frame of reference, eventually even visible. When uttering example (896), the text-internal speaker is in the settlement of Syndassko. He is asked why the moorage for ships is being erected some kilometres away from the settlement, and now he explains that it is due to the deeper fairway over there.

9 In the given example, as well as in similar contexts, the verb *gin-* 'make' has the additional connotation 'mean'.

- (896) *Ūös-küt küččügüj munna, ol ihin itinne*
 fairway-POSS.2PL small here that because.of over.there
būol-ar ūös-küt.
 be-PRS.3SG fairway-POSS.2PL
 'The fairway is small here, therefore the fairway is over there.'
 (KiPP_2009_Syndassko_nar.021)

Further spatial orientation is often established with the relational nouns described in Section 3.1.3, whereby the referential anchor can be either the speaker (897) or any other referent (898).

- (897) [...] *ol diēk inni-biti-tten, bu kamanda biēr-el-ler.*
 that towards front-POSS.1PL-ABL this command give-PRS-3PL
 '[In the morning ...] those from in front of us give this command.'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.088)

- (898) *Hirga-tin inn-i-ger n'ilčagaj*
 sledge-POSS.3SG.GEN front-POSS.3SG-DAT/LOC wet
tom-mut it tur-ar.
 freeze-PTCP.PST dog stand-PRS.3SG
 'In front of his sledge, a wet and chilled through dog is standing.'
 (AsKS_19XX_Amulet_nar.194)

An exception of this pattern are the terms for the left and right side of something, which are the adjectives *kaŋas* 'left' and *uŋa* 'right'. When not used as modifiers like, e.g. in *kaŋas/uŋa atak* 'left/right leg', these terms most often occur together with the postposition *diēk* 'towards' like in example (899).

- (899) [...] *kaŋas diēk, uŋa diēk emiē ikki-li: kihi.*
 left towards right towards also two-DISTR human
 '[There are two people in the front], on the left and the right also two people on each side.'
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.050)

Since the geographical environment on the Taimyr Peninsula is rather monotonous, the most important landmarks for spatial orientation are the tundra (both Arctic and forest tundra), rivers, lakes, and the sea in the north-eastern part of the Dolgan territory. The tundra is called *mūōra* in Upper Dolgan and *tā* in Lower Dolgan, whereby the former term sporadically occurs in Lower Dolgan speech as well. The meaning 'tundra' is not original to the items: *mūōra* is a

borrowing from Russian *more* ‘sea’ and is polysemous in Dolgan, too, meaning ‘tundra’ and ‘sea’. *tîâ* is an inherited Turkic item, which initially meant ‘(forested) mountain’ (cf. Turkish *dağ* ‘mountain’) (Teniřev 2001: 94–95); even in Sakha, *tîâ* means ‘forest’ and ‘taiga’, and the word lacks the meaning ‘tundra’ (Slepcev 1972: 417). In (Lower) Dolgan, *tîâ* designates both ‘tundra’ and ‘forest’. The dialectal distribution of the terms *mûôra* and *tîâ* can be explained when considering the geography of the relevant zones of settlement. In the Lower Dolgan settlements at the Gulf of Khatanga (Zhdanikha, Novorybnoe, Syndassko), the tundra is always south-eastwards since north-westwards, there is the sea. As for Popigay, there is a rather hilly forested tundra than flat Arctic tundra around the settlement. This means that the forest and the tundra are in the same direction and can thus easily be named likewise. In the Upper Dolgan settlements along the rivers Kheta and Avam (Kheta, Katyryk, Volochanka, Ust’-Avam) and formerly around the lakes near Norilsk, the situation is different. Here, the Arctic tundra is north-westwards, and the forested Putorana Mountains are south-eastwards. Hence, ‘tundra’ and ‘forest’ can hardly be referred to by the same item. Instead, the polysemous term *mûôra* ‘tundra; sea’ is used. Indeed, the vast Arctic tundra may appear like a sea, whence in Upper Dolgan, the meaning of the term has been extended (see also Stachowski (2010: 241) for a more detailed account).

As was already touched upon in the introductory sections, the axis Dudinka-Khatanga is essential for the Dolgan ethnogenesis. The relevant rivers along this axis, i.e. Kheta and Khatanga, as well as the river Popigay in the very north-east, are also important for spatial orientation for the Dolgans since they facilitate orientation and movement. Reference to a point upriver is established with the adverbs *ûôhe* ~ *û:he* ‘up; upwards; upriver’ and *ûôhetten* ~ *û:hetten* ‘from up; from upriver’, and reference to a point downriver is established with the adverbs *allara:* ‘down; downwards; downriver’ and *allara:ttan* ‘from below; from downriver’.

As for the description of cardinal points, the Dolgan system appears to be “nothing but chaos” (Stachowski 2010: 234) at first glance. The following terms for cardinal points can be found in Dolgan:

north	<i>mûôra, allara:</i>
south	<i>hoguru:, ta:s, ûôhe</i> ~ <i>û:he</i>
west	<i>ha:pat, mûôra, ûôhe</i> ~ <i>û:he</i>
east	<i>allara:, ta:s</i>

Given the geographical environment described above, it seems logical to assume that the central axes of orientation for the Dolgans are not in north-south and east-west but northwest-southeast and southwest-northeast direc-

tions. The former axis is essential for migrations with the reindeer, i.e. from the settlements to the tundra and back. The latter axis is crucial when moving along the rivers Kheta and Khatanga, i.e. formerly along the Khatanga Trading Way. Given this, the term *mūōra* ‘lit. tundra’ means ‘north-west’, *ta:s* ‘lit. stone’ means ‘south-east’, *ūōhe ~ ü:he* ‘lit. up(river)’ means ‘south-west’ and *allara* ‘lit. down(river)’ means ‘north-east’. Consequently, the primary cardinal points in Dolgan are actually not cardinals but inter-cardinals (Stachowski 2010: 237). Example (900) illustrates this very neatly. The speaker—living in the settlement of Novorybnoe—tells that she was born on the other side of the Gulf of Khatanga, i.e. north-westwards from Novorybnoe. After that, she came to Novorybnoe to marry her husband, i.e. south-eastwards from her place of birth.

- (900) *Mūōra dīēk törö:-büit-üm, onton er-ge*
 northwest towards be.born-PST2-1SG then husband-DAT/LOC
bar-am-mīn ta:s dīēk hir-dem-mit-im.
 go-CVB.SEQ-1SG southeast towards land-VBZ-PST2-1SG
 ‘I was born in the north-west, having married, I lived more south-eastwards.’
 (UkET_AkEE_19940424_SongsTales_conv.UkET.002)

Finally, the less frequent terms *hoguru*: ‘south’ and *ha:pat* ‘west’ are cognate to Sakha *soguru*: ‘id.’ and a loan from Russian *zapad* ‘id.’, respectively; they, indeed denote the cardinals south and west (Stachowski 2010: 237). To sum up, it can be said that the expression of spatial orientation in Dolgan was largely adapted to the geographical environment on the Taimyr Peninsula and, thus, to the needs of orientation there.

11.1.8 Temporal Orientation

Like in the case of spatial orientation, linguistic expressions of temporal orientation may be deictic or referential. The primary distinction between the moment of speech and another time—in both past and future—is established with the adverbs *ani* ‘now’ and *oččogo* ‘then’, like in example (901). Additionally, temporal reference to a time long ago can be established with *bilir* ‘long ago; once upon a time’, like in example (902).

- (901) *Oččogo olus da itir-bet e-ti-lere*
 then very EMPH get.drunk-NEG.PTCP.PRS AUX-PST1-3PL
ani-gi kördük.
 now-ADJZ like
 ‘At that time the people didn’t drink that much as nowadays’ [people].’
 (PoNA_AkPG_1994_MPXarlampiev_nar.PoNA.081)

(902) *Bilir* *d'on* *olor-but,* *toŋus-tar.*
long.ago people live-PST2.3SG Ewenki-PL
'Long time ago, there lived people, Ewenks.'
(ErSV_1964_OldManHares_flk.001)

CHART 182 Deictic expressions for temporal orientation

Time	Dolgan term	Notes
last year	<i>biliri:n</i>	lit. 'last; past'
day before yesterday	<i>inara: kün</i>	<i>inara:</i> 'opposite' + <i>kün</i> 'day'
yesterday	<i>begehe: ~ begehe</i>	
today	<i>bügün</i>	< <i>bu</i> 'this' + <i>kün</i> 'day'
this year	<i>bijil</i>	
tomorrow	<i>harsin</i>	
day after tomorrow	<i>öjü:n ~ öjün</i>	
next year	<i>ehi:l</i>	

For more precise deictic temporal expressions, only days and years play a role in Dolgan. Thereby, the system is symmetrical since a reference to both the last and the next year, as well as to both the previous and the following two days, can be established. If another time point in the past or the future shall be referred to, the given temporal unit is modified with *biliri:n* 'last; past' and *nöŋüö* 'next', respectively, e.g. *nöŋüö ij* 'next month'. Chart 182 lists the deictic expressions for temporal orientation in Dolgan.

As for time periods expressed by referential expressions, it can be said that the traditionally relevant units are years, seasons, months and times of the day for Dolgans. Nevertheless, the applicable terms exhibit some linguistic peculiarities. Dolgan *d'il* 'year', though ultimately cognate to, e.g. Turkish *yıl*, is no successor form of Common Turkic **jil*, but a Mongolic loan, cf. Khalkha Mongolian *žil* and Buryat *žel* (Tenišev 2001: 70–71). If the Dolgan form were a successor of **jil*, its shape should be **hil*, cf., e.g. Dolgan *huöl* 'way' < Common Turkic **jol* > Turkish *yol* (Johanson 2021: 366–368). Ubrjatova (1985: 37–38) notes the parallel forms *d'il* and *hil* in Norilsk Dolgan; in the INEL Dolgan Corpus, the less frequent variant *hil* appears a dozen times. The terms *ij* 'month' and *kün* 'sun' are homonymous, also meaning 'moon' and 'sun', respectively. In the former case, this homonymy implies that *ij* originally designated a lunar month with 29.5 days, but today, it certainly refers to a month in the Gregorian calendar.

CHART 183 Dolgan terms for time periods

Time period	Dolgan term	Notes
year	<i>d'il, (hil)</i>	the former < Mongolic
month	<i>ij</i>	also meaning 'moon'
week	<i>nediele</i>	< Russian <i>nedelja</i> 'id.'
day	<i>kün</i>	also meaning 'sun'
hour	<i>čas</i>	< Russian <i>čas</i> 'id.'
minute	<i>minuta</i>	< Russian <i>minuta</i> 'id.'

The units of weeks, hours and minutes are nowadays known and familiar among the Dolgans but traditionally not relevant. This differentiation can be shown by the fact that the former time units are expressed by inherited Dolgan terms, whereas Russian loanwords are exclusively used for the latter.

When referring to a specific year, the year is expressed by the relevant ordinal numeral, to which additionally the propriative suffix -LA:K is attached. Most often, like in example (903), only the numbers referring to the decade and the year are spelt out.

- (903) *Bieh-uon törd-üs-te:k d'il-tan ülele:-bit-im būō.*
five-ten four-ORD-PROPR year-ABL work-PST2-1SG EMPH
'I was working since [19]54.'
(BeEI_KuNS_1998_Teacher_conv.BeEI.106)

The seasons are as displayed in Chart 184. Additionally, the term *karaŋa kihin* 'polar night; lit. black winter', lasting from November to January, is worth mentioning in this context.

Coming to months, Dolgan exhibits native terms for their designation. All terms (see Chart 185 below) are based on the noun *ij* 'moon; month'. Since traditionally, the Dolgans did not know a calendar system and the lunar months constantly shift over the years, it is likely that the Dolgan months are not fixed to the dates in the Gregorian calendar. Unfortunately, this cannot be reconstructed with the available material. As can be seen from the list below, most terms are related to weather phenomena (e.g. *kün taksar ija* 'January; month of the sunrise') or important events for reindeer herding (e.g. *taba emijdir ija* 'April; month of the lactation of reindeer'). Moreover, the data collected in the 1930s by E.I. Ubrjatova from Norilsk Dolgan differ to some extent from the otherwise attested data. The differences are most prominent in the case of the autumn-

CHART 184 Dolgan terms for seasons

Season	Dolgan term	Notes
spring	<i>ha:s</i>	also meaning 'age'
summer	<i>hajin</i>	
autumn	<i>kühün</i>	
winter	<i>kihín</i>	
polar night	<i>karaŋa kihín</i>	lasting from November to January

nal months September, October and November. Here, Norilsk Dolgan refers to Orthodox saints' days, whereas natural phenomena are taken as descriptions in other varieties.

Given the manifold terminology, some comments are in order here. The given terms can be categorized into two groups: First, descriptive or depictive terms like *irgakta ija* 'month of the mosquitos' and second, terms connected to the Orthodox calendar like *Ujbanı̂ap ija* 'month of Ivanov's [day]'; thus, containing Russian proper names. Interestingly enough, Stachowski (2000: 295–297) argues that the latter group represents the traditional Dolgan terminology better than the former group: According to him (Stachowski 2000: 297), the former group contains “ad hoc formations”, which do not occur in natural Dolgan speech. From my point of view, this is a too strict judgement as related to the former group. Admittedly, complex forms like *taba emijdi:r ija* 'month of the lactation of reindeer', formed with a heavy noun phrase as an attribute, may be artificial to a certain extent. Nevertheless, the denomination of lunar phases in naming months is traditionally common to many Siberian people. The Russian ethnographer K.M. Rychkov collected, e.g. a list of Sym Ewenki terms for months in the 1910s (see transcript NNR3_1913_Months_misc in the INEL Evenki Corpus, Däbritz & Gusev 2021), which is hardly influenced by Russian in any manner. There, a period in June ~ July is called *iryakta* 'lit. botfly' and a period in September ~ October is called *uwun* 'lit. coastal ice' in Sym Ewenki. Consequently, neither the Dolgan terms listed in Chart 185 appear to be that constructed as Stachowski (2000) argues. However, Stachowski (2000: 297) is correct in pointing out that the Dolgan terms are hardly exact counterparts to the months within the Gregorian calendar but instead periods corresponding to lunar phases, which may be variable in different years.

As for usage patterns, it has to be noticed that the Russian terms are used more often in modern Dolgan speech. Nonetheless, the traditional terms for

CHART 185 Traditional Dolgan terms for months

Month	Dolgan term	Literal meaning
January	<i>kün taksar ija</i>	month of the sunrise
February	<i>pa:s tüher ija</i>	month when the deadfalls fall
	<i>üöles ija</i>	month of the smokehole
	<i>ülest ija</i> (Norilsk)	???
March	<i>hiraj hilijar ija</i>	month when the face gets warmer
	<i>hīṭaṇan ija</i>	month of the burbots
April	<i>taba emjdir ija</i>	month of the lactation of reindeer
May	<i>tugut törür ija</i>	month of the birth of [reindeer] calves
June	<i>kömüöl ija</i>	month of the grease ice
	<i>u: keler ija</i> (Norilsk)	month when the water comes
July	<i>kuma:r tüher ija</i>	month when the mosquitos fall
	<i>birdak ija</i> (Norilsk)	month of the mosquitos
August	<i>irgakta ija</i>	month of the reindeer botfly
September	<i>bulka:hīn ija</i>	month of tempest
	<i>tū:n karaṇarar ija</i>	month when the night gets dark
	<i>Ujbaniṭap ija</i> (Norilsk)	month of Ivanov's [day]
October	<i>bu:s toṇor/toṇoror ija</i>	month when the ice freezes
	<i>Pokruṭop ija</i> (Norilsk)	month of Pokrov's [day]
November	<i>kün tüher ija</i>	month of the sunset
	<i>Mitirēp ija</i> (Norilsk)	month of Dimitriev's [day]
December	<i>karaṇa kihīn ija</i>	month of the polar night
	<i>karaṇa kem</i> (1st half)	dark time
	<i>kutujak ka:mar keme</i> (2nd half)	time when the lemmings walk
	<i>karaṇa kün ija</i> (Norilsk)	month of the dark day

months exist, and elder Dolgans do recognize them. Example (904) shows the usage of the traditional term for 'August', whereas, in example (905), the Russian term for 'January' is used.

- (904) *Irgakta* *ij-a* *baran-ar*
 reindeer.botfly month-POSS.3SG run.OUT-PTCP.PRS
kün-ner-e *tur-but-tara* *iti: bagaji.*
 day-PL-POSS.3SG stand.up-PST2-3PL hot very
 'The last days of August became very warm.'
 (PoNA_19900810_TripToVoločanka_nar.002)

(905) [...] *kihij-ŋi janvar' ij-ga dieri.*
winter-ADJZ January month-DAT/LOC until
'[After Kursk I was at places, where the actual war took place], until the
winter month January [in the year 1944].'
(MiXS_1967_SoldierInSecondWorldWar_nar.043)

The days of the week are referred to by the relevant Russian terms without exception in the analyzed material; example (906) illustrates this.

(906) *Subbota aji ill-e:čči-bit, pan'ede'ln'ik-ka töttörü*
Saturday at.every take.away-HAB-1PL Monday-DAT/LOC back
ill-e-bit.
take.away-PRS-1PL
'Every Saturday we collect [the children], on Monday we bring [them]
back.'
(PoPD_KuNS_2004_Life_conv.PoPD.096)

Finally, the times of the day are as displayed in Chart 186, the terms being used both as nouns in argument position and as temporal adverbs.

CHART 186 Dolgan terms for times of the day

Time of the day	Dolgan term	Notes
morning	<i>harsierda ~ harsiar̥da</i>	
noon	<i>kün ortoto</i>	lit. 'middle of the day'
evening	<i>kiehe</i>	
night	<i>tü:n</i>	
midnight	<i>tü:n ortoto</i>	lit. 'middle of the night'

11.1.9 Traditional Life

As described in Section 1.4, all central domains of the traditional Dolgan way of life are connected to the reindeer, reindeer herding and reindeer hunting. In what follows, the extensive reindeer terminology of Dolgan will be presented at first. I owe special thanks to Florian Jark, who accurately collected, arranged and analyzed the numerous reindeer terms. After discussing this semantic field, the Dolgan types of housing and transport are touched upon.

In Section 11.1.5, it is stated that Dolgan distinguishes between domesticated and wild individuals of the species *Rangifer tarandus*, the reindeer: Wild

reindeer are called *ki:l*, whereas domesticated reindeer are called *taba*. Since the Dolgans learned reindeer herding from the Ewenks, it is not surprising that reindeer terminology is predominantly borrowed from Ewenki. However, the cover term for domesticated reindeer, *taba*, is no Ewenki borrowing but has cognates in the Turkic language family, e.g. Turkish *deve* ‘camel’. First of all, reindeer are categorized according to their sex and fertility. Female reindeer are called *tihī*—this term is also used for other animals, but then the animal has to be further specified. More seldom, female reindeer are referred to with *ba:jtahin*, which is ultimately a Mongolic loan, cf. Written Mongolian *bajitasun* (Kałużyński 1961: 36). According to Stachowski (1998: 52), the term may also refer to infertile female reindeer in Dolgan, but the analyzed material cannot support this. Instead, the term *ba:ŋga:j* ~ *ma:ŋga:j*, a borrowing from Ewenki *wa:ŋgaj* ‘infertile female reindeer’ (Vasilevič 1958: 78), is used in this domain. The most neutral term for male reindeer is *bur*, which designates both bulls and castrated male reindeer. Reindeer bulls are referred to with *atir*, castrated male reindeer are called *aktami*: (*bur*). Both *bur* and *atir* are inherited Turkic items, having narrowed their meaning to reindeer, and the modifier *aktami*: is taken from the Ewenki verb form *akta-mi*: ‘castrate-INF’ (Vasilevič 1958: 21). Stachowski (1993a: 184) additionally names *nara* ~ *na:ra*: ‘uncastrated reindeer bull’ (< Ewenki *na:ra*: ‘id.’), but this item is again not attested in the analyzed material. Finally, there are two more specific terms: *oro:ti*: designates both a reindeer calf that has been born late in the year as well as its mother (< Ewenki *oro:ti*: ‘reindeer calf born late in the year’), and *n’eyčēn* is used for (wild) reindeer bulls which have thrown off their antlers (< Ewenki *nī:ŋčā:n* ‘without antlers’). The examples (907) to (909) show some of the discussed terms in relevant contexts.

- (907) [...] *tugut-ta:k tihī hild’-ar*
 calf-PROPR female.reindeer go-PRS.3SG
d’iē-ti-ger.
 house-POSS.3SG-DAT/LOC
 ‘[...], a female reindeer with a calf is going around his house.’
 (MiPP_1996_OldManButterfly_flk.057)

- (908) *Bihigi ejīē-ke ol ikki atir-i*
 1PL.PRO 2SG.PRO-DAT/LOC that two reindeer.bull-ACC
bīēr-iēk-pit.
 give-FUT-1PL
 ‘We will give you those two reindeer bulls.’
 (PoS_PrG_1964_Kaamyylaak_flk.027)

- (909) *Aktami: bur emis bagaji kel-er.*
 castrated male.reindeer fat very come-PRS.3SG
 'A very fat castrated reindeer bull comes.'
 (BoND_1964_ThreeBrothers_flk.064)

In addition to sex and fertility, the reindeer's age is a decisive parameter for their denomination. Reindeer calves are generally called *tugut* in the year when they are born, the specification to their sex being as follows: *irgek tugut* 'male calf' vs *tihi tugut* 'female calf'. According to Stachowski (1993a: 217), a female reindeer calf can also be called *taragaj* ~ *tarakaj*, which usually designates a one-year-old or two-year-old female reindeer. A reindeer calf, which has just been born, can additionally be called *hahil tugut* 'yellow calf' ~ 'fox calf' (Popov 1935: 203). The term *hahil* is also used for human children when being breastfed, cf., e.g. [...] *hahil ogolo:k* '[...] he has a breastfed child' (BoND_1964_ThreeBrothers_flk.003). From the second year of age, the term *tugut* is not used anymore. Instead, there is a long list of terms specifying the sex, age, and eventually, fertility of the reindeer; most of these terms are borrowed from Ewenki, whence this is not explicitly noted in Chart 187.

Besides that, reindeer are also named regarding their function in nomadizing and everyday life. First of all, there are tamed reindeer fed with bread—they are called *a:ku*. The origin of the term is worth commenting on since it occurs in all Samoyedic languages of the Taimyr Peninsula: Nganasan *auku* (Wagner-Nagy 2019: 480), Enets *auka* (Sorokina & Bolina 2009: 48), and Tundra Nenets *awka* (Lehtisalo 1956: 14). Therefore, Chelimsij (2000: 321) argues convincingly that this item is one of the few Nganasan loanwords in Dolgan since the term is widely spread in Uralic languages (inherited in Northern Samoyedic and borrowed to Khanty and Komi), but Ewenki lacks it. A special type of tamed reindeer, used in a calling game on wild reindeer, is called *ondo:do* (< Ewenki *ondo:gdo* 'id.'). Since reindeer are included in nomadizing for pulling sledges and carrying luggage, they are also named according to their function, as Chart 188 shows. A term worth commenting on from an ethnographic perspective is *ugučak* ~ *učak* 'riding reindeer' < Ewenki *ugučak* 'id.'. Here it can be shown exceptionally well that not only the term was borrowed from Ewenki, but also the concept behind it since Tungusic people were the only people in Central Siberia using reindeer as beasts of burden as well as for riding them (Forsyth 1992: 50).

Since reindeer are not sedentary animals, people have to follow them when they wander. As described in Section 1.4, the Dolgans were therefore traditionally semi-nomadic. The concept of a nomadic lifestyle is expressed with the lexeme *kös*, which is used both nominally meaning 'nomad' ~ '(reindeer)

CHART 187 Dolgan terms for reindeer according to their age

Age	Sex	Dolgan term	Notes
Before reaching the age of fertility (usually < 2 years)			
1–2 years	female	<i>taragaj ~ tarakaj</i>	< Mongolic
1–2 years	female	<i>mūōjka</i>	
1–2 years	male	<i>mūōjka</i>	
1–2 years	male	<i>abalaka:n ~</i> <i>abilaka:n</i>	
After reaching the age of fertility (usually ≥ 2 years)			
1 year	female (having calved)	<i>aɲni ~ eɲni</i>	
2 years	female	<i>hačari:</i>	
≥ 2 years	female (having calved)	<i>in'e tihi</i>	lit. 'mother female'
3 years	female (having calved)	<i>bi:rde törö:büt</i>	lit. 'having calved once'
4 years	female (having calved)	<i>ikkite törö:büt</i>	lit. 'having calved twice'
5 years	female (having calved)	<i>üste törö:büt</i>	lit. 'having calved thrice'
x years	female (having calved)	<i>x-TA törö:büt</i>	lit. 'having calved x times'
3 years	male	<i>ikte:ne</i>	
4 years	male	<i>n'amarkana ~</i> <i>n'ogarkana</i>	
5 years	male	<i>amarkana</i>	
6 years	male	??? ^a	
7 years	male	<i>bur</i>	
> 7 years	male	<i>hippit taba</i>	lit. 'ripe reindeer'

- a As for Sakha, Hauenschild (2008: 3) gives the term *a:ta süppüt* 'having lost its name' for a six-year-old reindeer bull. This is apparently because there are specific terms for reindeer bulls under six years, but afterwards they are simply called *bur* 'bull'. Whether this can be transferred to Dolgan, remains a question for further research; in the analyzed material the term does not occur.

caravan' and verbally meaning 'nomadize'. In a slightly more abstract sense, the process of nomadizing is referred to with the nominalized form *köhür*. Whereas *kös* is used as a cover term, the term *ölgöbün* (< Ewenki *əlgəwu:n* 'one of reindeer from caravan') only designates reindeer caravans in summer. Example (910) illustrates this since the speaker explains how children imitate nomadizing in summer.

CHART 188 Dolgan terms for reindeer according to their function when nomadizing

Function	Dolgan term	Notes
riding reindeer	<i>ugučak ~ u:čak</i>	< Ewenki <i>ugučak</i> ‘id.’
front reindeer in a team	<i>n’uōŋu</i> <i>n’uōŋuhut</i>	< Ewenki <i>n’ogu:</i> ‘front; reins’ <i>n’uōŋu</i> + -ČIt ‘AGN’
left reindeer in a team	<i>kostu:r</i>	< Ewenki <i>kostu:r</i> ‘id.’
right reindeer in a team	???	
last reindeer in a caravan carrying the tent poles	<i>urahala:k</i>	<i>uraha</i> ‘pole’ + -LA:K ‘PROPR’
herd of free-running domesticated reindeer behind a caravan	<i>delemiče:</i>	< Ewenki <i>dələmičə:n</i> ‘reindeer running apart from caravan’

(910) *Hajin kajdak hild’-ar-gin, ta:h-i*
in.summer how go-PTCP.PRS-POSS.2SG.ACC stone-ACC
munn’u-n-aŋ-ŋin ölbökü:n o:nŋ’-uō-ŋ.
gather-MID-CVB.SEQ-2SG summer.caravan play-FUT-2SG
‘How you nomadize in summer, you collect stones and play reindeer caravan.’
(UkET_AkEE_19940424_SongsTales_conv.UkET.035)

When nomadizing, different types of sledges are used for transporting both humans and luggage, the latter being called *tahagas* in Dolgan. The terms listed in Chart 189 occur in the analyzed material. Given the occurrence of apparently homonymous terms, their exact usage domains remain, however, partly unclear.

The last term listed leads to the Dolgan terms for different dwelling types. There is much variation in this lexical domain since, on the one hand, different dwelling traditions were mixed in the Dolgan ethnogenesis and, on the other hand, the semi-nomadic lifestyle called for different types of dwellings at different times of the year. The primary term for any kind of dwelling is *d’iē*, which is used for houses made of wood or bricks as well. The most prominent type of dwelling is the conical pole tent—often also referred to as “chum” in English literature—which is called *uraha d’iē* (*uraha* ‘pole’ + *d’iē* ‘dwelling; house’) in Dolgan. This type of dwelling was taken over from the Ewenks; thus, many terms for parts of the pole tent are of Ewenki origin, too. Given the round layout of the pole tent, the space within was organized around a fireplace. The place

CHART 189 Dolgan terms for different types of sledges

Function	Dolgan term	Notes
sledge	<i>hirga</i>	< Mongolic
cargo sledge	<i>heti:</i>	
broad cargo sledge with walls at front and back	<i>bütej heti:</i>	‘closed’ + ‘cargo sledge’
reindeer sledge for travelling	<i>turku</i>	< Ewenki <i>turku</i> ‘reindeer sledge’
high sledge for travelling	<i>ha:ŋki</i>	< Russian <i>sanki</i> ‘sledge’
travelling sledge, open in front and back, with curved runners	<i>ira:ki</i>	< Ewenki <i>ira:ka</i> ~ <i>iru:ka</i> ‘cargo sledge’
sledge house	<i>bolūōk</i> <i>hirga d’iē</i>	< local Russian <i>balok</i> ‘id.’ ‘sledge’ + ‘house’

in the back part of the tent behind the fire was reserved for men (*ketegeri:n*), the front part of the tent was the place for women and crockery items (*čonjal* ~ *čūōŋa:l* ~ *čūōnal*). The non-exhaustive Chart 190 lists a handful of important features of the pole tent.

Besides the pole tent, a couple of further dwelling types were known to the Dolgans. To what extent they were used is hard to judge from a synchronic point of view; nevertheless, the attested terminology is presented here. Besides the term *uraha d’iē*, also the Ewenki term *d’uka:* is attested for naming the pole tent. However, this term and its diminutive form *d’uka:ka:n* have the secondary meaning ‘birth tent’: In this small tent, women gave birth to their child, only accompanied by a midwife. For other people, it was not allowed to enter this tent. The woman giving birth bent over a pole called *togoho*. After the delivery, the tent poles and the birth pole are not dismantled but left. In example (911), the speaker tells that she was giving birth in the tundra and that her birth tents are still there.

- (911) [...] *d’uka-ka:t-tar-im* *ani da tur-al-lar*.
tent-DIM-PL-POSS.1SG now and stand-PRS-3PL
‘[I gave birth in the tundra, of course, my God], my small tents still stand there.’
(SuON_KuNS_19990303_HardLife_conv.SuON.279)

In winter, Dolgans also dwelled in pit-dwellings at the edge of the forest tundra. These pit-dwellings are called *golomo* (< Ewenki *golomo* ‘id.’), *baltisak* or

CHART 190 Dolgan terms for parts of the traditional pole tent

Part	Dolgan term	Notes
place in the tent for crockery, place for women	<i>čonjal</i> ~ <i>čūonja:l</i> ~ <i>čūonal</i>	< Ewenki <i>čo:ŋa:</i> 'id.'
back part of the tent, place for men	<i>ketegeri:n</i>	
tent pole	<i>uraha</i>	
pocket at the lower part of the tent cover for attaching the tent pole	<i>un'a:n</i>	
main supporting tent poles	<i>hūōna</i>	< Ewenki <i>ho:na</i> 'id.'
pole at the tent entrance, like a door- post	<i>irke</i>	
threshold	<i>ku:ltir</i> ~ <i>koltir</i>	< Ewenki <i>kultir</i> 'id.'
pole in the middle of the tent, where the crossbar <i>ike:ptin</i> is attached	<i>čimka</i>	< Ewenki <i>či:mka</i> 'middle pole in tent'
string to attach the crossbar <i>ike:ptin</i> at the tent's scaffold	<i>ana:ptin</i>	
crossbar in the tent, where the kettle is hung up	<i>ike:pti:n</i>	< Ewenki <i>i:kə:ptu:n</i> 'id.; hook for hanging up the kettle'
hook for hanging up the kettle	<i>oldo:n</i>	< Ewenki <i>oldon</i> ~ <i>ollon</i> 'id.'
leather cover for the tent	<i>öldü:n</i>	< Ewenki <i>əllun</i> 'lower part of leather cover'
smokehole	<i>üōles</i>	
leather cover for the smoke hole	<i>ne:pti:n</i>	< Ewenki <i>nəptən-</i> 'cover'
part of tent cover close to smokehole	<i>üneke:n</i>	< Ewenki <i>unəkə:n</i> 'id.'

more seldom *balagan* (cf. Sakha *balagan* 'yurt'). All three have a rectangular layout with four bearing poles in the corners, yielding a pyramid. The walls of the dwellings are built with wooden planks and clay. According to Popov (1952: 165–166), the *golomo* was the smallest type of pit-dwellings lacking windows and a ceiling; a *baltisak* had a ceiling, but no windows either, and a *balagan* had both a ceiling and windows. Finally, in the 19th century, Russian merchants brought small huts built on sledges to the Taimyr Peninsula, which are called *bolūōk* (< local Russian *balok* ~ *bolok* 'id.') or *hīrga d'îē*, literally meaning 'sledge house' (Popov 1952: 166).

11.1.10 Folk Taxonomy

Whereas in Section 1.2, the endonyms and exonyms for the designation of Dolgans were described, this section focuses on the Dolgan terms for representatives of other ethnic groups. The Nganasans are called *ha:maj* in Dolgan, originating in Russian *samojed* ‘Samoyed’. Since word-initial *h-* replaced word-initial *s-* of the loan origin, it can be concluded that the term has been taken over to Dolgan in relatively early periods of contact between Russians and Dolgans. Given this etymology and the fact that a specific term for Enetses is missing in Dolgan, it seems reasonable to assume that *ha:maj* was also used to designate Enetses—at least Tundra Enetses, who were in contact with Nganasans and led a similar lifestyle. However, in modern Dolgan speech, Enetses are referred to by the Russian term *en’ec*. The third relevant Samoyedic group, the Nenetses, are called *d’ura:k ~ d’urak* in Dolgan, borrowed from the nowadays obsolete Russian exonym *jurak* ‘Nenets’. Opposed to the Enetses, the Nenetses are still today referred to with this term. Example (912) illustrates the divergent treatment of Enetses and Nenetses in Dolgan speech, the speaker talking about the ethnic groups present in Potapovo.¹⁰

- (912) *Iti haka-lar, d’ura:k-tar, en’ec-tar onton n’em’ec-tar.*
 that Dolgan-PL Nenets-PL Enets-PL then German-PL
 ‘That is, Dolgans, Nenetses, Enetses and Germans.’
 (SuON_KuNS_19990303_HardLife_conv.KuNS.039)

The Ewenks are called *tojus* by the Dolgans, borrowed from the obsolete Russian term *tungus* ‘Tungus; Ewenk’. At first glance, it appears counterintuitive that the Dolgans, having emerged from Ewenki clans, use a Russian exonym for denoting the Ewenks. However, it has to be kept in mind that the self-denominations of the Ewenki clans—most prominently *dulgan*—were turned into self-denominations of the Dolgans. Therefore, a foreign term had to be used to keep the ethnicities apart. Finally, the Sakha people are generally called *haka* in Dolgan, i.e. similar to the Dolgans themselves. In cases of potential ambiguity, however, the Russian term *jakut* can also be used to clarify that Sakha people are meant and not Dolgans. A good case in point is example (913), in which the interviewer asks her guest whether he sings his Dolgan songs along the lines of Sakha songs.

10 The Germans referred to here are probably descendants of war prisoners deported to forced labour camps (GULAG) in and around Norilsk.

- (913) [...] *jakut-tar iriā-lari-nan ta:k_da tard-a-gin ebit e:?*
Sakha-PL song-POSS.3PL-INS EMPH.R pull-PRS-2SG EVID AFF
 ‘[And so your songs] you get like the Sakha songs, right?’
 (ZhNA_KuNS_20XX_LifeAndMusic_conv.KuNS.009)

Russians are called *n’u:čča* by the Dolgans, a malapropism of the stem *rus’-*, which ultimately goes back to Old Norse. This kind of denomination of the Russians is widespread in Siberia, e.g. Nganasan *lūā?sa* (Wagner-Nagy 2019: 487), Ewenki *lu:ča ~ nu:ča ~ n’u:ča* (Myreeva 2004: 346) or Kolyma Yukaghir *lu:či:* (Nikolaeva 2006: 251).

Finally, two more doubtful demonyms shall be discussed. In Section 11.1.6, the term *d’üke:bil uōta* ‘Yukaghir’s fire’ for the aurora borealis was mentioned. The included demonym *d’üke:bil* ‘Yukaghir’ unanimously is of Sakha origin, and it is not clear whether it was traditionally used in Dolgan. Nowadays, however, Yukaghirs are instead referred to with the Russian-based term *jukagir*. Moreover, in legends and tales (like in (914)), so-called ‘people with sewn faces; tattooed people’ occur; in Dolgan, they are called *tigi:le:kter*.

- (914) *Öl-lü-büüt d’e, tigi-i-le:k-ter ih-el-ler heri-nnen, uōn*
 die-PST1-1PL well sew-NMLZ-PROPR-PL go-PRS-3PL war-INS ten
d’iē kihi.
 house human
 ‘We are going to die, “the sewn [people]” are going with war to us, ten families.’
 (PoKK_1964_TwoOrphanBoys_flk.011)

It is not clear, which ethnicity is designated with this term, allegedly it is the Chukchi people. This seems possible since Chukchi people are familiar with tattooed faces and Chukchi people also appear in the legends of other people of the Taimyr Peninsula. However, it has also to be noticed that in Nganasan, a similar term, namely *horə sočəməə* ‘sewn face’, designates Ewenki people in specific contexts (Wagner-Nagy 2019: 487). The Ewenks, in turn, are always hostile and belligerent in Nganasan legends, which makes it possible that the concept of people with tattooed faces rather designates any foreign and hostile people than a concrete ethnicity. Therefore, the concrete denotation of Dolgan *tigi:le:kter* cannot be finally established, if there is one at all.

11.2 Loanwords

As can be already stipulated from the sociolinguistic descriptions in Chapter 1, there are many loanwords in Dolgan from different donor languages and different periods. In Section 11.2.1, the loanwords are discussed from a rather semantic point of view. The loanwords are discussed according to the relevant donor language, yielding separate loanword strata. In Section 11.2.2, the loanwords are analyzed from a rather formal point of view; that is, their adaptation and integration into the grammatical system of Dolgan are discussed.

11.2.1 *Loanword Strata*

Dolgan and its predecessor languages had contacts with a handful of foreign languages in different periods. Ultimately, the beginning of the contact history of Dolgan can be seen in Proto-Turkic contacts with, e.g. Indo-European languages or Chinese. Thus, Dolgan *heri* ‘war; army; troop’ (< PT **čerig*) is ultimately an Indo-Aryan loan into Proto-Turkic (Tenišev 2001: 572–573), from where it was preserved until modern Dolgan. Since these items are common to many modern Turkic languages and relatively few, they are not discussed further. The investigation starts with the large stratum of Mongolic loanwords in Dolgan, which were borrowed already to Pre-Dolgan-Sakha (Section 11.2.1.1). In Section 11.2.1.2, the numerous Ewenki loanwords are discussed. Many Mongolic items were borrowed to both Pre-Dolgan-Sakha and Ewenki, cf. Dolgan *hüge* ‘axe’ vs Northern Ewenki *hukə* ~ Southern Ewenki *sukə* ‘id.’ (Vasilevič 1958: 368, 492), from Mongolic *sūke* (Kałużyński 1961: 51). Consequently, it is hard, if possible at all, to decide whether the Dolgan form is a successor of the Mongolic borrowing in Pre-Dolgan-Sakha, or whether Ewenki transmitted it. More research is highly needed in this context. Section 11.2.1.3 deals with both older and more recent Russian loanwords. Finally, Section 11.2.1.4 touches upon several items of Samoyedic and proposed Yukaghir provenance.

11.2.1.1 Mongolic

As suggested in the introductory text to this section, Mongolic loanwords in Dolgan were not borrowed recently from a modern Mongolic language such as Khalkha Mongolian or Buryat. Instead, the Mongolic loanwords present in Dolgan stem from the time when the predecessors of both Dolgans and Sakha people settled in the vicinity of Lake Baikal and were pushed northwards by Mongolic tribes. According to Kałużyński (1961: 119) and Pakendorf & Novgorodov (2009: 501), this period is to be dated between the 12th and the 16th centuries. Since the diversification of Middle Mongolian into the modern Mongolic languages took place in parallel, it is nearly impossible to determine

CHART 191 Mongolic borrowings in Dolgan core lexicon

Dolgan form	Dolgan meaning	Sakha form	Sakha meaning
<i>d'on</i>	people, family	<i>d'on</i>	people, family
<i>ker-gen</i>	family	<i>ker-gen</i>	husband, wife
<i>ogonn'or</i>	old man, husband	<i>oyonn'or</i>	old man, husband
<i>eme:ksin</i>	old woman, wife	<i>eme:χsin</i>	old woman, wife
<i>ed'ij</i>	older sister	<i>edži:j</i>	male ego's older sister
<i>tojon</i>	master, chief	<i>tojon</i>	master, chief, father-in-law
<i>i:gireler</i>	twins	<i>igireler</i>	twins
<i>dogor</i>	friend	<i>doyor</i>	friend
<i>hiraj</i>	face	<i>sirej</i>	face
<i>kūōmej</i>	voice	<i>kūōmej</i>	throat
<i>üle</i>	work	<i>üle</i>	work
<i>d'il</i>	year	<i>d'il</i>	year, season

the exact donor language. Therefore, the items are simply labelled as Mongolic here, referring to the whole language family. The contacts of the speakers of Pre-Dolgan-Sakha with speakers of Mongolic are usually claimed to be rather hostile. Nevertheless, quite a significant layer of social and cultural terminology was taken over by the former, so that there must have been peaceful contacts to some extent as well (Kałużyński 1961: 119–121).

In the INEL Dolgan Corpus, approximately 180 stems (of ca. 4,000 stems overall) can unambiguously be classified as having a Mongolic provenance, yielding a share of just under five per cent. As for the Sakha lexicon, Pakendorf & Novgorodov (2009: 505–506) estimate the percentage of Mongolic loanwords at approximately ten per cent. This imbalance has one apparent practical reason: The INEL Dolgan Corpus undoubtedly does not cover the entire Dolgan lexicon, nor all potential borrowings. Additionally, the northward migration of the Dolgans, their way of life in Northern Siberia and the intense contact with Ewenki people imply that the amount of Mongolic loanwords in Dolgan is smaller than in Sakha. Two patterns are prevalent in this context. First, the given term is lost from Dolgan since the relevant referent does not appear in the Dolgan environment. A good case in point is, e.g. Sakha *moyoj* ‘snake’, which is absent in Dolgan since there are no snakes on the Taimyr Peninsula. The second pattern can be called Ewenki or Russian takeover, good cases in point being Dolgan *bile*: ‘mud’ (< Ewenki *bulə*: ‘mud, clay’) vs Sakha *biri*: ‘mud’ (< Mon-

golic) and Dolgan *dūōska* ~ *dosko*: ‘board; plank’ (< Russian *doska* ‘id.’) vs Sakha *χaptahin* ‘board’ (< Mongolic).

The most relevant semantic fields of Mongolic loans are law (e.g. Sakha/Dolgan *tojon* ‘master; chief’), the house (Sakha/Dolgan *tīergen* ‘yard’), emotions and values (Sakha/Dolgan *itegej-* ‘believe’), and technology (Sakha *sep*, Dolgan *hep* ‘tool’). Additionally, some items from the Sakha and Dolgan core lexicon are of Mongolic origin, cf. the list in Chart 191. As can be seen, in most cases, the form and meaning of the borrowing are identical in both languages. This pattern, however, is not valid for the borrowed kinship terms since the Dolgan kinship terminology has undergone heavy Ewenki influence (see Section 11.1.2 for details).

Apart from the above-described lexical material, some grammatical items have also been borrowed from Mongolic. The most prominent of them are as follows:

- the adverbializer -ččI (Section 3.6.2) (Kałużyński 1961: 112),
- the adverbializer -TA forming multiplicative adverbs (Section 3.6.2) (Kałużyński 1961: 118),
- the anterior converb -A:t (Section 6.3.2.4) (Kałużyński 1961: 112),
- the habitual participle -A:ččI (Sections 6.3.1.6 and 6.4.5) (Kałużyński 1961: 70),
- the iterative-semelfactive suffix -ŋnA: (Section 12.4) (Kałużyński 1961: 104–105),
- and the nominalizer -s (Section 12.2) (Kałużyński 1961: 114–116).

To sum up, it can be stated that there is a considerable layer of Mongolic loanwords in Dolgan. As for a comparison with Sakha, the amount of Mongolic loanwords in Dolgan is to some extent lower than in Sakha. Additionally, all Mongolic loanwords present in Dolgan appear in Sakha, too. Finally, the amount of Mongolic loanwords in Dolgan is closed since Dolgan synchronically has no contact with any Mongolic language.

11.2.1.2 Ewenki

Before going into the details of the linguistic material of Ewenki provenance in Dolgan, some introductory comments are in order. In Section 1.3, it is explained that the Dolgan language arose when speakers of Ewenki (and to a lesser extent of local Russian) began to shift to Sakha as their first language during the 17th and 18th centuries. Given this, it appears a bit misleading to speak of Ewenki “loanwords” in Dolgan since no speakers of Dolgan came into contact with Ewenki, but the shift of Ewenki speakers to Sakha led to the emergence of Dolgan (see also the more elaborate discussion in Stachowski (2002: 4–6)). Nevertheless, Ewenki lexical material found its way into the unambiguously

Turkic-based Dolgan language. Therefore, I will continue to speak of Ewenki loanwords in what follows, but keep in mind that the contact scenario is undoubtedly peculiar. Since Dolgan-Ewenki contacts did not cease after the establishment of the Dolgan language, one should consequently expect two layers of Ewenki loanwords in Dolgan. First, the lexical material the Ewenki speakers “took along” when shifting to Dolgan, and second, the lexical material borrowed afterwards. However, there are no criteria established to distinguish the former from the latter layer safely. Stachowski (2002: 4–5) is correct in pointing out that the usual formula “the older the borrowing, the more adapted it is” does not hold for the Dolgan-Ewenki case due to the unique contact situation. In early times, the speakers were by default fully bilingual and, thus, there was hardly a need to adapt Ewenki items to a Dolgan model. Semantic perspectives may be a bit more comprehensive in this respect, as the following will show, but in neither case, a sharp borderline between “old” and “young” Ewenki loanwords in Dolgan can be drawn.

As sporadically mentioned in Section 11.1, there are a handful of Ewenki items in the Dolgan core lexicon. These are undoubtedly the body parts *irge* ‘brain’ (< Ewenki *irgə* ‘id.’) and (*h*)*ača* ‘guts; gut fat’ (< Ewenki *hača* ‘id.’), the colour terms *če:lke* ‘white’ (< Ewenki *čəlkə* ‘id.’) and *koŋnomuŋ* ‘black (of reindeer)’ (< Ewenki *koŋnomo* ‘black’) and additionally the term *gojobu:n* ‘wound’ (< Ewenki *gojowu:n* ‘id.’). Besides that, the Dolgan core lexicon—in the narrow sense of the term—exhibits no Ewenki loanwords. When it comes to the semantics fields “fauna and flora”, “housing”, and “reindeer herding”, there are many Ewenki items in the Dolgan lexicon. In the INEL Dolgan Corpus, the Ewenki terms from these semantic fields make up ca. two per cent of the whole lexicon. Since the Ewenki origin of the terms was already marked in the respective Sections 11.1.5 and 11.1.9, they are not discussed further here. Additionally, the reader is referred to the extensive lists in Ubrjatova (1985: 58–67). Besides items from the named semantic fields, there is a couple of Ewenki items from the semantic field “technology; crafts” in the analyzed material: *gedere* ‘leather scraper’ (< Ewenki *kədərə* ‘id.’), (*h*)*alka* ‘hammer’ (< Ewenki (*h*)*alka* ‘id.’), *ma:bit* ~ *ma:mit* ‘lasso’ (< Ewenki *ma:wut* ~ *ma:mit* ‘id.’), and *nip̄te* ‘place for chopping wood’ (< Ewenki *nip̄tə* ‘padding for processing meat’). Finally, also the frequent diminutive suffix -kA:N is a borrowing from Ewenki (see Section 12.1.1).

Coming back to the stratification of Ewenki loanwords in Dolgan, the observed patterns are at least partly elusive. It can be observed that the Ewenki items in the Dolgan lexicon form relatively homogenous groups tightly connected to the traditional lifestyle of both Ewenks and Dolgans. This pattern is not surprising since the Dolgan people preserved this way of life from their partly Ewenki ancestors. Moreover, the concentration of Ewenki items in the named

semantic fields may stand to reason to assume that they were taken over to Dolgan rather “en bloc”. This circumstance, in turn, entails that the takeover probably took place when Dolgan became the ingroup language among the people along the Khatanga Trading Way (see Section 1.3). Moreover, the presence of the given Ewenki items in all local varieties of Dolgan corroborates this assumption. If the borrowing process had lasted longer and taken place during later Dolgan-Ewenki contacts, it would be expected that there would be significantly more Ewenki items in Upper Dolgan. This, however, is not the case. Nevertheless, it certainly cannot be excluded that single items were borrowed from Ewenki later. A good case in point may be the Dolgan endonym *tege* (< Ilimpi Ewenki *tagə*: ‘clan, stem, people; Dolgan’), which was used among the Norilsk Dolgans, but not in other varieties of Dolgan.

11.2.1.3 Russian

Since Dolgan is a minority language in the Russian Federation and Russian is the dominant language in all official spheres of life, it is expected that Dolgan exhibits Russian loanwords, too. Roughly 1,000 stems of Russian provenance in the INEL Dolgan Corpus (out of ca. 4,000 stems) impressively illustrate the overall presence of Russian elements in Dolgan speech. However, the picture is more multifaceted than it might appear at first glance. First of all, in modern Dolgan speech, it is often hard to decide whether an item of Russian provenance is indeed a borrowing into Dolgan or a spontaneous code-switch. The different degrees of integration of Russian items into Dolgan speech can be illustrated by example (915). Here, the Russian discourse item *vaabš’e-ta* ‘at all’ is inserted without further modification. Then there are the stems *kam’is’s’ija* ‘commission’, *praxad-* ‘go through’ and *n’estrajevoj* ‘non-combatant’, to which Dolgan suffixes are attached. In example (916), even an inflected Russian item is inserted into Dolgan speech.

- (915) *Avgust ij-ga* *vaabš’e-ta* *kam’is’s’ija-ni*
 august month-DAT/LOC at.all.R-EMPH.R commission-ACC
praxad-i: *gin-ni-m –* *n’estrajevoj-ga.*
 go.through-CVB.SIM make-PST1-1SG non_combatant-DAT/LOC
 ‘In August, I passed the [military] commission [and was assigned] to
 the non-combatant.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.002)

- (916) [...] *ki:l-in* *et-e* *vkusnee*
 wild.reindeer-POSS.3SG.GEN meat-POSS.3SG tasty.COMP.R
taba *et-i-ne:ger.*
 domesticated.reindeer meat-POSS.3SG-COMP

‘[...], the meat of the wild reindeer is tastier than the meat of the domesticated reindeer.’

(AnIM_2009_Sausage_nar.039)

In what follows, only those Russian items are discussed, which can be assumed to be part of the Dolgan lexicon, and are not spontaneously inserted into Dolgan speech. Two criteria for analyzing Russian items in Dolgan as loanwords or not can be named. First, the more the item is adapted phonologically, the more likely it will be a loanword instead of a spontaneous switch (see also Section 11.2.2.1). Second, the more the item is integrated into Dolgan morphology (see also Section 11.2.2.2), the more likely the item is a loanword.

There are three central layers of Russian loanwords in Dolgan, which can be distinguished from each other semantically and to a lesser extent formally. The first layer contains those Russian items, which were borrowed into Dolgan during the contacts with merchants, taxmen and Old Believers along the Khatanga Trading Way, i.e. from the 17th century up to the first half of the 20th century. The second layer is rather semantically demarked, containing all terminology being connected to the adventure of Soviet authorities, to the erection of kollektives and the introduction of the Soviet education system. The third layer, finally, contains primarily such terms, which are connected to the material culture of the late 20th and 21st century, e.g. designating media, information technology, modern means of transport and alike.

Since the initial contacts of Dolgan and Russian are tightly connected to trade, it is not surprising that relevant terminology makes up a significant part of the first layer of Russian loanwords in Dolgan. This group includes terms directly connected to trade, e.g. *holkuōbaj* ‘rouble’ (< Old Russian *celkovyj* ‘coin worth 1 rouble’), *kupīēs* ‘merchant’ (< *kupec* ‘id.’) and *la:pki* ‘shop’ (< *lavka* ‘id.’), but also measuring units and larger numerals, e.g. *bī:rstē* ‘Verst (= 1,067 meters)’ (< *versta* ‘id.’), *pu:t* ‘pood (= 16.4 kilogrammes)’ (< *pud* ‘id.’) and *tī:hičča* ‘1000’ (< *tysjača* ‘id.’). Additionally, terms of administration and social organization were introduced into Dolgan such as *bila:s* ~ *bla:s* ‘power’ (< *vlast’* ‘id.’), *hokuōn* ~ *hakuōn* ‘law’ (< *zakon* ‘id.’), *hūt* ‘court’ (< *sud* ‘id.’), *kine:s* ‘prince’ (< *knjaz’* ‘id.’) and *staršina* ‘village elder’ (< *staršina* ‘id.’). Coming into contact with Russian meant also coming into contact with Russian material culture. Consequently, the denomination of formerly unknown items was taken over to Dolgan, the following list not being exhaustive: *ačā:k* ‘stove’ (< *očag* ‘id.’),¹¹ *bī:lke* ‘fork’ (<

11 Note that there is also the parallel form *ohok* ‘stove’ in Dolgan, as well as in Sakha. Ulti-

vilka 'id.'). *buōčuku* ~ *buōčka* ~ *buōčku* 'barrel' (< *bočka* 'id.'). *čaj* 'tea' (< *čaj* 'id.'). *hibinn'e* 'pig' (< *svin'ja* 'id.'). *kelīep* ~ *kilīep* ~ *hilīēb* 'bread' (< *chleb* 'id.'). *korūōba* 'cow' (< *korova* 'id.'). *lūōsku* 'spoon' (< *ložka* 'id.'). *ostūōl* ~ *ostol* 'table' (< *stol* 'id.'). *teriēlke* 'plate' (< *tarelka* 'id.').

Apart from the merchants acting along the Khatanga Trading Way, a group of Old Believers—so-called Tundra Peasants (see Section 1.3)—came to the Taimyr Peninsula. The effects and effectiveness of Christianization shall not be discussed here. Still, a bunch of Russian loanwords connected to Orthodox belief was introduced into Dolgan: *araj* 'paradise' (< *raj* 'id.'). *hajta:n* 'satan, devil' (< *šajtan* 'id.'). *hibiētūōj* 'holy' (< *svjatoj* 'id.'). *kirīēs* 'cross' (< *krest* 'id.'). *lōčūōk* 'deacon' (< *d'jačok* 'id.'). *pūōp* 'priest' (< *pop* 'id.'). Closely connected to this semantic field are proper names of Orthodox origin, which were borrowed to Dolgan, e.g. *Bahī:laj* 'Vasiliy', *Bī:če* 'Vitya', *Debge:n* 'Yevgeniya', *Hemen* 'Semyon', *Mi:trej* 'Dmitriy', *Pōdūōsse* 'Fedosya', *Ujba:n* 'Ivan'. For an exhaustive list of the Dolgan versions of Russian proper names, see Ubrjatova (1985: 73).

In many cases, the loanwords in Dolgan have the same meaning as they have in modern (Standard) Russian. However, there is a handful of Russian loanwords, not necessarily related to the discussed semantic fields, where this does not hold. Given the long period of possible borrowing and the social environments on the Taimyr Peninsula before the adventure of the Soviets, it can be assumed that the described Russian loanwords were borrowed from local Russian varieties instead of Standard Russian. The following items are good cases in point for this pattern: *ba:biska* ~ *ba:buska* 'midwife; (granny)' (cf. Standard Russian *babuška* 'granny' and *povitucha* 'midwife'), *baskūōj* ~ *boskūōj* 'beautiful' (< local Russian *baskoj* 'id.', vs Standard Russian *krasivyy*), *doro:bo* 'hello' (< local Russian *zdorovo* 'id.', vs Standard Russian *zdravstvuj(te)*), *uska:n* 'hare' (< local Russian *uškan* 'id.', vs Standard Russian *zajac*) (see also Stachowski (2002: 13–16) for this topic).

Generally, it can be seen that the oldest Russian loanwords have undergone quite severe phonological changes, which adapted them to the phonological system of Dolgan. These adaptations are discussed in Section 11.2.2.1. Moreover, most of the Russian items from this layer are nouns referring to concrete concepts. Two verbs, however, are worth mentioning since they are semantically central: *dumajda*:- 'think' (< Russian *dumat* 'id.') and *tūōlkula*:- 'understand' (<

mately, the item has a Turkic provenance, *ohok* being its direct successor in Dolgan and Sakha, whereas *ača:k* comes from Russian *očag*, which in turn is a Turkic loan (Fasmer 1987a [1958]: 177).

Russian *tolkovat* 'explain; determine'). In this context, it can already be mentioned that the verb stems are extended with the verbalizer -LA:, which is the usual pattern for integrating Russian verb stems into the grammatical system of Dolgan (see Section 11.2.2.2 for details).

The second layer of Russian loanwords is connected to the Soviet period and its social, cultural and material entailments. Thus, this layer is semantically relatively homogenous, many items denoting concepts of social, economical and political organization in Soviet times, e.g. *briga:da* 'brigade' (< *brigada* 'id.'), *habîeskaj* ~ *hebîeskej* ~ *sav'eskej* ~ *sav'etskaj* 'soviet' (< *sovetskij* 'id.'), *hopkûôs* ~ *hapkûôs* ~ *savxo:z* 'sovkhoz; state farm' (< *sovchoz* 'id.'), *kolkuôs* ~ *kalkuôs* ~ *kolxo:z* ~ *kalxo:z* 'kolkhoz; collective farm' (< *kolchoz* 'id.'), *p'ian'er* 'pioneer' (< *pioner* 'id.'), *pr'eds'edat'el* 'chairman' (< *predsedatel* 'id.'). Formally, many of the borrowed items are initially acronyms in Russian, the most frequent being *hopkûôs* 'sovkhoz' (cf. Russian *sovetskoe chozjajstvo* 'Soviet farm') as well as *kolkuôs* 'kolkhoz' (cf. Russian *kollektivnoe chozjajstvo* 'collective farm'). Less frequent cases are, e.g. *kamsamol* 'Communist youth league' (< Russian *Komsomol* 'id.' standing for [Vsesojuznyj leninskij] *kommunističeskij sojuz molodeži* '[All-Union Leninist] Young Communist League') or *Sm'erš* 'SMERSh; counterespionage' (< Russian *SMERŠ* 'id.' standing for *smert' špionam* 'death for the spies'). Another big group of Russian loanwords, taken over into Dolgan during Soviet times, is connected to education. Cases in point are, e.g. *ha:dik* ~ *sa:dik* 'kindergarten' (< *sadik* 'id.'), *internat* 'boarding school' (< *internat* 'id.'), *kila:s* ~ *klass* 'class; grade' (< *klass* 'id.'), *kinige* 'book' (< *kniga* 'id.'), *uč:tal* ~ *učital* ~ *učit'el* 'teacher' (< *učitel* 'id.') and *uskuōla* ~ *oskuōla* 'school' (< *škola* 'id.'). As can be seen, the phonological adaptation of the second layer of Russian loanwords exhibits much more variation than the first layer. Most often, there are at least two variants, whereby one variant shows adaptations, and the other one does not. This variation is due to the emerging Dolgan-Russian bilingualism during Soviet times, in consequence of which more and more Dolgans became fluent in Russian, which, in turn, reduced the need for adapting the borrowed Russian items.

Finally, the third layer of Russian loanwords in Dolgan contains all items connected to the (material) culture as well as economy and politics of the 20th and 21st century, e.g. *bilisipîet* 'bicycle' (< *velosiped* 'id.'), *buran* 'snow scooter' (< *buran* 'id.'), *mašina* 'car; machine' (< *mašina* 'id.'), *m'il's'ija* 'police' (< *milicija* 'id.'), *rad'io* ~ *rad'ima* 'radio' (< *radio* 'id.'), *vistavka* 'exhibition' (< *vystavka* 'id.'). Again, a varying degree of adaptation is visible, whereby, however, a tendency towards less adaptation can be observed.

Apart from borrowings, it is worth mentioning that in the literary Dolgan language, there are some attempts to form Dolgan terms for the given realia.

They, however, are not used in free Dolgan speech at all. Within the analyzed material, they predominantly occur in the texts of the speaker Nikolaj Anisimovič Popov, a novelist and journalist. The given recordings were read out as a radio broadcast, a case in point being example (917).

- (917) *“Alikel” a:t-ta:k hamal’ot-tar köt-ör*
 Alykel name-PROPR aircraft-PL fly-PTCP.PRS
hir-deri-tten [...].
 place-POSS.3PL-ABL
 ‘From the airport named “Alykel”, [it is not long until reaching Khatanga, the aircraft “An-24” brought us immediately].’
 (PoNA_2000X_GirlFromTundra_nar.005)

11.2.1.4 Various

Besides the items from the loanword strata described in the three previous sections, there is a handful of entries in the Dolgan lexicon of other provenance. Chelimskij (2000: 321–322) names five Nganasan loanwords in Dolgan, all semantically connected to the traditional way of life on the Taimyr Peninsula. Two of them are worth further comment. Dolgan *a:ku* ‘tamed reindeer’ was traditionally considered an Ewenki loanword in Dolgan. However, Chelimskij (2000: 321) correctly points out that the item is absent in relevant Ewenki dialects. In turn, it is present in all Northern Samoyedic languages (Nganasan, Nenets and Enets) as well as in Komi (< Permic < Finno-Ugric < Uralic) and Khanty (< Ob-Ugric < Finno-Ugric < Uralic). Therefore, it is much more plausible to assume it is a (Northern) Samoyedic item, which was borrowed to Komi, Khanty, and—most importantly—Dolgan. The proposed item *sil:ka* ‘tray for meat and fish’, in turn, appears suspicious, since it does not adhere to Dolgan phonotactics in the given form; instead of word-initial *s-*, word-initial *h-* would be expected, yielding a form **hila:ka*. Moreover, it does not occur in the analyzed material, nor in further lexicographic sources, whence it still waits for an empirical attestation. Nevertheless, the parallel to Nganasan *s’il’a?kə* ‘id.’ is apparent.

Finally, there is the toponym *Pöpügej* ~ *Papigaj* in Dolgan, denoting both a river and a settlement at the eastern edge of the Dolgan territory, which is of Nganasan origin. According to Chelimskij (2000: 322), it corresponds to modern Nganasan *hūāa bigaj* ‘big river’ succeeding from Old Nganasan **pa(a) bigaj* ‘id.’.

Additionally, there are the items *tit* ‘larch’, *tut* ‘hunter’s skis covered with fur’, *mu:ŋka* ‘seine’, and *meld’i* ‘whole; during’ (postposition) in both Dolgan and Sakha, for which a Uralic origin has been proposed or could be debated. *tit* ‘larch’ is assumed to be a Samoyedic loanword by Janhunen (1977a: 160)

CHART 192 Nganasan borrowings in Dolgan

Dolgan	Meaning	Nganasan	Further cognates
<i>a:ku</i>	tamed reindeer	<i>auku</i> 'id.'	Tundra Enets <i>auku</i> , Tundra Nenets <i>awka</i> ~ <i>ɲawka</i>
<i>baka</i>	scraper for cleaning fur	<i>bakəə</i> 'scraper'	Tundra Enets <i>bakoo</i> 'scraper'
<i>lepse</i>	ring at the end of the driving pole	<i>lapsi</i> 'id.'	
<i>lojto</i>	planks used as a floor in the pole tent	<i>lojt'ü</i> 'id.'	Tundra Enets, Forest Enets, Tundra Nenets <i>lata</i> 'id.'
<i>silaka</i>	tray for meat and fish; also used as a padding for processing fur	<i>s'il'a?kə</i> 'id.'	Tundra Enets <i>suroko</i> 'id.'

and Stachowski (1993a: 224), whereas Räsänen (1969: 479) considers it as a Finno-Ugric loanword present in Uyghur, Kirghiz, Khakas, Oirot as well as Dolgan/Sakha, the ultimate donor language being Mansi *t̪i:t* ~ *t̪e:t*. Given the wide presence of the word in North-Eastern and South-Eastern Turkic languages, it seems more plausible to account for it as an early Samoyedic loanword (cf. Proto-Samoyedic **t̪it̪əjəŋ* ‘cedar pine’ (Janhunen 1977b: 127)) into a yet undefined Turkic variety, from which it developed to Dolgan and Sakha *t̪i:t*. A very similar item is *tut*: ‘hunter’s skis covered with fur’, which has parallel forms in Nganasan *tutə* (<*tuta*> in the source), Forest Enets *tudo*, Tundra Enets *turo*, as attested and translated as German *Schneeschuh* ‘snow shoe’ by Castrén (1855: 89). Although Nenets and the Southern Samoyedic languages lack the item, it seems reasonable to account for it as an old Samoyedic loanword, the process of borrowing being analogous to *t̪i:t* ‘larch’. In any case, a direct loan from Nganasan or Enets appears to be implausible given that *tut*: ‘hunter’s skis covered with fur’ is attested in Sakha as well (Slepcov 1972: 410). The item *mu:ŋka* ‘seine’ is analyzed as an early Samoyedic loanword in Dolgan and Sakha by Anikin (1997: 474–475), the Proto-Samoyedic form being **poŋka* (Janhunen 1977b: 127). Given that word-initial **p* would probably yield Turkic **b*, which, in turn, would be nasalized due to the syllable-final *ŋ*, this etymology seems completely solid. Consequently, *t̪i:t* ‘larch’, *tut*: ‘hunter’s skis covered with fur’ and *mu:ŋka* ‘seine’ can be relatively safely regarded as early Samoyedic loanwords into a Pre-Dolgan-Sakha Turkic variety, whereby all three items are preserved in both Dolgan and Sakha.

The postposition *meld'i* ‘whole; during’ is claimed to be a Selkup loanword in Sakha by Pakendorf & Novgorodov (2009: 508), which would entail that it

is a Selkup loanword in Dolgan, too. Indeed, Selkup *me:l̥ti* ‘always’ (attested in Brykina et al. 2020) exhibits clear phonetic parallels. However, when and in which contact scenario Dolgan/Sakha should have borrowed it from Selkup remains unexplained. The same is true for Dolgan and Sakha *t̥i*: ‘small boat’. According to Pakendorf & Novgorodov (2009: 508), it is a Ket loanword in Sakha. The item is indeed attested in Ket (e.g. Georg 2007: 62, 127), but again the contact scenario appears doubtful. Räsänen (1969: 477) claims the item is an Ewenki loanword in Sakha (and consequently in Dolgan, too), whereby the loan origin’s form is Ewenki *d’aw* ‘boat’. In this case, the contact scenario is plausible, but the phonetics is not. Usually, Ewenki *d’-* is preserved in Dolgan, cf. *d’uka*: ‘tent; birth tent’ (< Ewenki *d’uka* ‘tent’). Whereas Dolgan *t̥i:t* ‘larch’, *tu:t* ‘hunter’s skis covered with fur’ and *mu:ŋka* ‘seine’, thus, indeed can be counted as old Samoyedic loanwords, the proposed Selkup and Ket origin of *meld’i* ‘whole; during’ and *t̥i*: ‘small boat’, respectively, is speculative from my point of view.

In addition to the items of Samoyedic and Ket origin discussed above, there is one peculiarity in the analyzed material, which is worth mentioning despite its statistical negligibility. In example (918), the stem *paŋka* ‘big tea kettle’ appears as the basis for a depictive verb with the rough meaning ‘stand around being thick’.

- (918) [...] *üs uraha d’ie kihi paŋka-j-an*
 three pole house MOD big.tea.kettle-VBZ-CVB.SEQ
tur-al-lar.
 stand-PRS-3PL
 ‘[Oh God], three pole tents are standing there big and thick.’
 (BeAM_199X_HumanInLandOfDeath_flk.023)

The formation of depictive verbs with the verbalizer *-j* is not unusual in Dolgan (see Section 12.3), but the stem *paŋka* ‘big tea kettle’ deserves more attention. Within the INEL Dolgan Corpus, there are no further instances of this item, but Stachowski (1993a: 202) and Afanas’ev et al. (1976: 197) attest to it. Moreover, they name Yukaghir *ponɣxa*: ‘small tea kettle’ as the loan origin. This etymology might hold both formally and semantically, but, astonishingly, the item is not attested in Sakha or Ewenki lexicographic sources. Therefore, it remains an open question for further research, whether the item is really of Yukaghir origin, and if so, whether it is a direct loan or transmitted via a third language.

CHART 193 Dolgan consonant system

	Labial	Coronal	Postalveolar	Palatal	Velar	Glottal
plosive	<i>p, b</i>	<i>t, d</i>		<i>d'</i>	<i>k, g</i>	
nasal	<i>m</i>	<i>n</i>		<i>n'</i>	<i>ŋ</i>	
affricate			<i>č</i>			
fricative		<i>s</i>				<i>h</i>
vibrant		<i>r</i>				
lateral		<i>l</i>				
approximant				<i>j</i>		

11.2.2 *Loanword Adaptation*

In the previous section, it was already stated at appropriate points that loanwords in Dolgan might be adapted both phonologically and morphologically. Phonological adaptation (Section 11.2.2.1) applies basically to all lexical items but may differ regarding the loanword stratum, the donor language or even idiolectally. Morphological adaptation, in turn, applies mainly to verbs borrowed to Dolgan (from Russian) and Pre-Dolgan-Sakha (from Mongolic), respectively (Section 11.2.2.2).

11.2.2.1 *Phonological Adaptation*

This section describes how loanwords into Dolgan are adapted to its phonological and phonotactic system. Thereby, Mongolic items are excluded from the discussion since their exact donor language—and, thus, the exact form of the given loan origin—is unknown. In general, two patterns of phonological adaptation can be observed in Dolgan: First, a sound absent in the Dolgan phoneme system is replaced by another sound; second, a sound present in the Dolgan phoneme system, but occurring in a phonotactically constrained position, is replaced by another sound. Both patterns are discussed together for the given sounds; hints to the relevant section in Chapter 2 are provided at appropriate points. The discussion starts with consonants, and afterwards, vowels are discussed. For the sake of handiness, Chart 193 repeats the consonant system of Dolgan.

Comparing this system to Ewenki and Russian, not many but essential differences can be observed (see Bulatova & Grenoble (1999: 4–5) for Ewenki and Berger (2015: 59–61) for Standard Russian). In contrast to Dolgan, Ewenki and Russian exhibit labial and labiodental fricatives, respectively. In Ewenki, the voiced labial fricative *w* is phonemic; its voiceless counterpart *f*, which may

be realized labially and labiodentally, occurs only as an allophone in word-final position. In Russian, the labiodentals *f* and *v* are phonemic. Russian and Ewenki loanwords in Dolgan, whose loan origins contain labial and labiodental fricatives, exhibit fortition, namely *f* > *p* and *v* > *b* (Stachowski 1999: 18). Moreover, Russian has the velar fricative *x*, which is also strengthened in most cases in Dolgan, yielding *k*; however, also *h* is attested as a variant in this case.

Pödüösse 'Fedosya' < Russian *Fedos'ja* 'id.'
hapküös 'sovkhos, state farm' < Russian *sovchoz* [-fx-] 'id.'
bi:lke 'fork' < Russian *vilka* 'id.'
kirabart 'bed' < Russian *krovat* 'id.'
ba:ŋga:j 'infertile female reindeer' < Ewenki *wa:ŋga:j* 'id.'
gojobu:n 'wound' < Ewenki *gojowu:n* 'id.'
küsej(i)n 'master' < Russian *chozjain* [x-] 'id.'
kiliēp ~ *hiliēp* 'bread' < Russian *chleb* [x-] 'id.'
porokūōt ~ *parahuōt* 'steamer' < Russian *parochod* [-x-] 'id.'
kolküōs ~ *kalküōs* 'kolkhoz; collective farm' < Russian *kolchoz* [-lx-] 'id.'

A similar fortition process is *j* > *d'* in word-initial position, which applies since Dolgan phonotactics do not allow word-initial *j*: Dolgan *d'ura:k* 'Nenets' < Russian *jurak* 'id.' and Dolgan *D'ebge:n* 'Yevgeniya' < Russian *Jevgenija*.

Another central characteristic of the Russian consonant system are the numerous affricates and sibilants (*c*, *č*, *s*, *z*, *š*, *ž*, *š'*), out of which only *č*' and *s* have counterparts in Dolgan, whereby the former is not palatalized there. The other named sounds are replaced by *s* and *h* in Dolgan, the latter occurring in the phonotactically and morphologically expected positions (word-initial, intervocalic) (Stachowski 1999: 17–18). The following non-exhaustive list illustrates this.

hut 'court' < Russian *sud* 'id.'
hokuōn ~ *hakuōn* 'law' < Russian *zakon* 'id.'
huga: 'pancake ice' < Russian *šuga* 'id.'
holküōbaj 'rouble' < Old Russian *celkovyj* 'coin worth 1 rouble'
hapa:s 'reserves' < Russian *zapas* 'id.'
kine:s 'prince' < Russian *knjaz* 'id.'
kupiēs 'merchant' < Russian *kupec* 'id.'
ti:hičča '1000' < Russian *tysjača* 'id.'
Bahi:laj 'Vasilij' < Russian *Vasilij*

Coming to the phonotactics of the plosives and *s* in loanwords in Dolgan, they behave like inherited plosives in relevant positions. The labial plosives *p* and

b are not evenly distributed in different positions within a word in Dolgan (*p* is prohibited intervocally, and *b* is prohibited syllable- and word-finally, see Section 2.3.1). This pattern is also reflected in the treatment of loanwords, a good case in point being the Dolgan reflexes of Russian *chleb* 'bread'. In its base form, Dolgan replaces word-final *b* with *p*, which yields the form *kiliēp* ~ *hiliēp*. In inflected forms, e.g. the accusative case form, again *b* occurs, cf. *kiliēb-i* 'bread-ACC'. The same can be observed in the case of *k* and *g*: *pas'olok* 'settlement' (< Russian *posëlok* 'id') vs *pas'olog-i* 'settlement-ACC'. Finally, also *s* changes to *h* in relevant positions in loanwords in Dolgan: *kine:s* 'prince' (< Russian *knjaz'* 'id') vs *kine:h-i* 'prince-ACC'.

As described in Section 2.3.1, *r*, *l* and *n* do not occur word-initially in inherited Dolgan words. In loanwords, word-initial *l* and *n* are taken over without any adaptation, e.g. *lampa* 'lamp' (< Russian *lampa* 'id.') and *noruôt* ~ *naruôt* 'nation; people' (< Russian *narod* 'id.'). In the case of *r*, a prothetic vowel is inserted in some cases, e.g. *araj* 'paradise' (< Russian *raj* 'id.'). However, there are many instances where this does not happen, e.g. *rad'io* 'radio' (< Russian *radio* 'id.'). Additionally, much variation can be observed in the analyzed material: For Russian *rota* 'company', both *orota* and *rota* 'id.' are attested as corresponding Dolgan items.

The next relevant issue for the phonological adaptation of loanwords in Dolgan are the phonotactic constraints on consonant clusters (see Section 2.3). Apart from *rt* and *lt* in word-final position, no consonant clusters are allowed within one syllable. To adapt loanwords to this constraint, either prothetic (word-initially) or epenthetic (word-internally) vowels are inserted to move the syllable boundary or break up the consonant clusters. Examples for this pattern are as follows.

- istiēne* 'wall' < Russian *stena* 'id.'
- ostol* 'table' < Russian *stol* 'id.'
- biriēme* 'time' < Russian *vremja* 'id.'
- kine:s* 'prince' < Russian *knjaz'* 'id.'
- kinige* 'book' < Russian *kniga* 'id.'
- palačinka* 'record; disc' < Russian *plastinka* 'id.'

The described consonant adaptations apply nearly without exception in Ewenki loanwords and older Russian loanwords, i.e. from the first layer of Russian loanwords (see Section 11.2.1.3). In the case of more recent Russian loanwords, there are often parallel forms, cf. *hopkūōs* ~ *hapkūōs* ~ *savxo:z* 'sovkhöz; state farm' (< Russian *sovchoz* 'id.') or *hamal'ot* ~ *samal'ot* 'aircraft' (< Russian *samolët* 'id.').

Coming to vowels, the vowel systems of Dolgan, Ewenki and Russian do not differ significantly (see Bulatova & Grenoble (1999: 4) for Ewenki and Berger (2015: 59–61) for Standard Russian). Importantly, Ewenki has the central vowel *a*, which is mainly replaced by *e* in Dolgan, e.g. *delemiçe*: ‘reindeer running apart from caravan’ (< Ewenki *dələmičə:n* ‘id.’). Sporadically, also other replacements can be observed, whereby *ö* as the labial counterpart of *e* appears to be most frequent, e.g. *ölgöbün* ‘caravan’ (< Ewenki *əlgəwun* ‘one of reindeer from caravan’). As for Russian, it is worth mentioning that /o/ is phonetically realized as [ɔ] or [ə] in unstressed positions in Standard Russian, but not necessarily in Russian dialects. The Russian loanwords in Dolgan partly reflect vowel reduction in the Russian loan origin and partly not, often yielding parallel forms, e.g. *kolkūōs* ~ *kalkūōs* ‘kolkhoz; collective farm’ < Russian *kolchoz* [kɒlxoz] ~ [kɒlxoz] ‘id.’. Like Dolgan, Ewenki exhibits phonemic vowel length. Long vowels in Ewenki loan origins are usually taken over to Dolgan, e.g. *gedere*: ‘leather scraper’ (< Ewenki *kədərə*: ‘id.’). Still, *o*: may be reflected by Dolgan *ūō*, e.g. *čūōŋa:l* ~ *čūōnal* (< Ewenki *čo:ŋa*: ‘id.’) and *hūōna* ‘main supporting tent poles’ (< Ewenki *ho:na* ‘id.’). The latter is due to the diphthongization of **er*, **or*: and **ö*: in Dolgan. A similar process can be observed in Russian loanwords in Dolgan, whereby, in this case, not vowel length, but the lexical accent is the driving factor, which is flexible in Russian. In Russian loanwords in Dolgan, stressed vowels are often represented by long vowels or diphthongs, respectively.

pastu:k ~ *pastu:x* ‘shepherd; reindeer herder’ < Russian *pastúch* ‘id.’
tí:hičča ‘1000’ < Russian *týsjača* ‘id.’
ispí:ske ‘match’ < Russian *spíčka* ‘id.’
d’ura:k ‘Nenets’ < Russian *jurák* ‘id.’
gūōrat ‘town’ < Russian *górod* ‘id.’
bilisipíet ‘bicycle’ < Russian *velosipéd* ‘id.’

Finally, also vowel harmony plays a role in adapting loanwords from Russian and Ewenki, but by far not as systematically as the patterns described above. If both palatal and velar vowels appear in the relevant loan origin, this is unified in many cases in Dolgan. Thereby, the Dolgan item can exhibit either palatal or velar vowels, whereby the former pattern is more frequent. Nevertheless, in not few cases, parallel forms can be observed, one of them being adapted to Dolgan harmony, the other one not.

teriêlke ‘plate’ < Russian *tarelka* ‘id.’
hüge ‘axe’ < Ewenki *hukə* ‘id.’
holkūōbaj ‘rouble’ < Old Russian *celkovyj* ‘coin worth 1 rouble’

irgakta ‘reindeer botfly’ < Ewenki *irgakta* ‘id.’
habîeskaj ~ *hebîeskej* ‘soviet’ < Russian *sovetskij* ‘id.’

Furthermore, in some items, no vowel harmony can be observed at all. Frequent cases in point are *hapsîem* ‘at all’ (< Russian *sovsem* ‘id.’), *kupîes* ‘merchant’ (< Russian *kupec* ‘id.’), *sa:dik* ~ *ha:dik* ‘kindergarten’ (< Russian *sadik* ‘id.’), *učital* ~ *učitel* ‘teacher’ (< Russian *učitel* ‘id.’).

Labial-illabial vowel harmony may also be reflected in Russian and Ewenki loanwords in Dolgan, but even less systematically. This variation is one crucial reason for the appearance of many parallel forms of relevant loanwords, e.g. *ma:mut* ~ *ma:mit* ~ *ma:but* ~ *ma:bit* ‘lasso’ (< Ewenki *ma:wut* ~ *ma:mit* ‘id.’) or *narūot* ~ *norūot* ‘people; nation’ (< Russian *narod* ‘id.’).

To sum up, both Russian and Ewenki loanwords in Dolgan are partly heavily adapted to Dolgan phonology and phonotactics. As a tendency, older Russian loanwords are adapted to a higher degree than younger Russian loanwords; in the case of Ewenki loanwords, this does not hold since no such stratification can be reliably established (see Section 11.2.1.2). Moreover, much variation can be observed, leading to parallel forms of the same lexical entry.

11.2.2.2 Morphological Adaptation

The morphological adaptation of loanwords into Dolgan depends on the word class of the given item and the relevant donor language. In what follows, this section is structured according to word classes, discussing common nouns, proper nouns, adjectives and verbs. Common nouns are not adapted when being borrowed to Dolgan, regardless of the donor language. Most often, the nominative singular form is borrowed, but a few semantically marked items (e.g. paired nouns or collective nouns) also have another case or number form as a base. In example (919), the Russian plural form *brovi* ‘eyebrows’ is borrowed but still inflected with the plural suffix -LAR.

- (919) *Tūok buōl-but* *araj brov’i-lar-ij?*
 what become-PST2.3SG only eyebrow.PL.R-PL-POSS.2SG
 ‘What has happened to your eyebrows then?’
 (KuDP_2009_Fire_nar.013)

Proper nouns generally behave likewise, not being morphologically adapted, but there is one important exception. To place names denoting towns like *Bryansk*, *Krasnoyarsk*, *Norilsk* or *Novosibirsk*—all ending with -sk—regularly the Russian adjective suffix -aj (see below for details) is added ((920) and (921)). In the case of place names denoting, e.g. *Dudinka* or *Volochanka*—not end-

ing with *-sk*—this does not happen. In the former case, *-sk* is a suffix that is etymologically related to the Common Slavic suffix *-ьскъ*, forming denominal adjectives indicating a quality related to the noun (Bielfeldt 1961: 154). Hence, the place names mentioned above must be analyzed as adjectives diachronically, representing the short form of adjectives (Bielfeldt 1961: 153, 159–161). Since Russian adjectives in Dolgan call for the adjective suffix *-aj* (see below), the given toponyms are treated likewise.

- (920) *Nu, otto üs č'a:s-ka Br'anskaj-i*
 well then three hour-DAT/LOC Bryansk-ACC
zan'imaj-d-tâk-kitin na:da.
 conquer-VBZ-PTCP.FUT-POSS.2PL.ACC need.to
 'Well, then at three o'clock, you have to conquer Bryansk.'
 (ChVD_AkEE_198204_SoldierInWar_nar.089)

- (921) *Onton Aksa:na-bit emiê üörem-mit-e*
 then Oksana-POSS.1PL also learn-PST2-3SG
Krasnajarskaj-ga.
 Krasnoyarsk-DAT/LOC
 'Then our Oksana studied also in Krasnoyarsk.'
 (KiPP_KuNS_200211_LifeManyChildren_conv.178)

The discussion of toponyms ending with *-sk* leads to the morphological behaviour of adjectives borrowed to Dolgan. Adjectives borrowed from Mongolic or Ewenki do not exhibit any adaptation, e.g. *d'adanj* 'poor' (< Mongolic) and *če:lke* 'white' (< Ewenki *čalkə* 'id.'). Adjectives borrowed from Russian, in turn, by default exhibit the adjective ending *-aj* instead of Standard Russian *-yj*, *-ij* or *-oj*. Both forms are etymologically connected, and the former can be analyzed as the unstressed form of *-oj*, which is still preserved dialectally, whereas *-yj*, *-ij* are loans from Old Church Slavonic in Russian (Bielfeldt 1961: 58, 63, 161). If the stem of the borrowed adjective contains palatal vowels, *-aj* can also yield *-ej* in Dolgan. Within the INEL Dolgan Corpus, i.e. the following adjectives borrowed from Russian can be observed: *habîeskaj* ~ *hebîeskej* 'Soviet' (< *sovetskij* 'id.'), *kammun'ist'ič'eskej* 'communist' (< *kommunističeskij* 'id.'), *l'it'eraturnaj* 'literary' (< *literaturnyj* 'id.'), *sarskaj* 'czarist' (< *carskij* 'id.').

Finally, non-inherited verbs in Dolgan obligatorily undergo morphological adaptation. In what follows, only items borrowed from Mongolic and Russian are discussed since the analyzed material lacks verbs directly borrowed from Ewenki. There are, admittedly, verbs like *gojobu:nna:-* 'be wounded' or *ugučaktan-* ~ *u:čaktan-* 'ride on riding reindeer'. These, however, have no verbal

counterparts in Ewenki but are formed from the borrowed nouns *gojobun* ‘wound’ and *ugučak* ~ *u:čak* ‘riding reindeer’, combined with the verbalizers -LA: and -LAN, respectively.

As described in Section 6.1, Dolgan verb stems may end with a long low vowel, a diphthong, a handful of consonants, and the glide *j*. Verbs borrowed from Mongolic fall either into the first or into the last group, e.g. *hana:-* ‘think’ (cf. Mongolian *sana-* ‘id.’ (Kałużyński 1961: 69)) and *korguj-* ‘hunger’ (cf. Kalmyk *χaryv-nv-* ‘faint from hunger’ (Kałużyński 1961: 142)). In the latter pattern, -*j* is a verbalizer (see Sections 6.1 and 12.3), which is synchronically not productive anymore. Verbs borrowed from Russian fall into the first group without exception since the verbalizer -LA: (see Section 12.3) is always attached to the Russian verb stem. The verb stem used depends on the verb class the Russian verb belongs to. Not going into details of the complex Russian verb classification, verbs with the present tense stem ending with -*aj* are treated differently from other verbs. In the case of the former group, the present tense stem—homonymous with the second-person singular imperative—is used as the base for borrowing, e.g. *dumajda:-* ‘think’ (cf. Russian *dumaj-* < *dumat* ‘think’). In the case of the latter group, the infinitive form of the verb is used, e.g. *zvan’itta:-* ‘phone’ (cf. Russian *zvonit* ‘id.’) or *m’atta:-* ‘knead’ (cf. Russian *mjat* ‘id.’). In the case of reflexive verbs, the verbalizer -LA: is attached after the Russian reflexive suffix -*s’a* [-sa], e.g. *int’er’esavatsala:-* ‘be interested’ (cf. Russian *interesovat’sja* ‘id.’). As can already be guessed from the named examples, also recent Russian loanwords and even code-switches are treated like this, cf. the verb *vijasn’ajda:-* ‘clarify’ (< Russian *vyjasnjat* ‘id.’) in example (922).

- (922) *D’e, bu-lar bîek atnašenija vîjasn’aj-d-îl-lar ebit.*
 well this-PL always relation.PL.R clarify-VBZ-PRS-3PL EVID
 ‘Well, they are apparently constantly clarifying relationships.’
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.198)

Derivational Processes

This chapter deals with the derivational morphology of Dolgan, i.e. with the formation of new lexemes out of other lexemes. Derivational morphology is undoubtedly highly complex in an agglutinative language and difficult to cover within a descriptive grammar. Since there is the very profound work of Stachowski (1997) (“Dolganische Wortbildung”), the chapter is kept relatively brief here, and it explicitly focuses on productive derivational suffixes. All relevant phenomena occurring in the analyzed material are named and listed, but not all are described in much detail. Instead, the appropriate references to Stachowski (1997) are provided.

12.1 Nominal > Nominal

This section deals with nominal derivational morphology, whereby nominals are derived from nominals. As illustrated in Sections 3.1 to 3.4, several word classes (nouns, adjectives, pronouns, numerals) behave very similarly in Dolgan regarding their inflectional categories. As for derivational morphology, it makes, however, sense to keep nouns and adjectives apart; accordingly, this section is split into four subsections that deal with the relevant derivational processes.

12.1.1 *Noun > Noun*

A handful of derivational suffixes in Dolgan form nouns from nouns. Chart 194 summarizes them (see Stachowski 1997: 7–36).

The most frequent and widely used diminutive suffix is -kA:N, which is a loan from Ewenki (Stachowski 1993c: 231; Stachowski 1997: 17). It expresses the littleness or fewness of the given referent and displays affection towards it.

- (923) *Bu ogo-ko:n tug-u kör-d-ö, ogo.*
 this **child-DIM** what-ACC see-PST1-3SG child
 ‘The little child has spotted something, the child.’
 (ChGS_UoPP_20170724_SocCogDesc_conv.UoPP.099)

CHART 194 Denominal suffixes forming nouns

Suffix	Function
-kA:N	diminutive, affection
-kA	diminutive
-čA:n	diminutive
-čIt	agent noun
-(I)msAk	inclination, affection, “philative”
-LI:N	sociative, accompaniment

(924) *Taŋas-ka:n biēr-bit on-tu-tu-gar emiē*
clothes-DIM give-PST2.3SG that-POSS.3SG-POSS.3SG-DAT/LOC also
as-ka:n.
food-DIM
‘He gave that one some clothes and also some food.’
(BeES_1997_HistoryOfKatyryk_nar.143)

The other diminutive suffixes fulfil similar functions but occur much more seldom. The suffix -čIt forms agent nouns, i.e. nouns describing a person dealing with something. In a more abstract sense, this suffix forms nouns expressing occupations. Since it is very peculiar, a note on its morphonological behaviour is in order here. The initial consonant changes depending on the stem-final sound, where it is attached to, but in an unexpected and not always regular way. After vowels, the allomorph -hIt occurs. After voiceless consonants, either -čIt or -sIt appears; after voiced consonants, it is either -čIt or -d’It (see also Section 2.5.3). (925) and (926) show two instances of agent nouns in their contexts.

(925) *Kaja, miniēttere pir’edka-lar-im bari-ta oloŋko-hut*
well my.PL ancestor-PL-POSS.1SG all-POSS.3SG tale-AGN
e-ti-ler.
be-PST1-3PL
‘Well, my ancestors were all tale-tellers.’
(UkET_AkEE_19940424_SongsTales_conv.UkET.029)

(926) *Balik-čit-tar kitil-ga luōtka-ların himala-l-i:l-lar.*
fish-AGN-PL shore-DAT/LOC boat-POSS.3PL.ACC tar-VBZ-PRS-3PL
‘The fishermen tar their boats on the shore.’
(PoNA_19910207_Fishing_nar.117)

The suffix *-(I)msAk* expresses the inclination or affection of a person towards something. Derived from the Old Greek word *philein* ‘love; like’, this suffix can maybe best be called “philative”, the gloss being *PHIL*.¹

- (927) *Hilieb-imsek bagaji.*
 bread-*PHIL* very
 ‘It [= a reindeer] likes bread a lot.’
 (PoTY_2009_Aku_nar.012)
- (928) *Bu ke kihi-ler aragi-msak-tar, kihil munnu-lak*
 this well human-PL alcohol-*PHIL-PL* red nose-*PROPR*
aragi-msak-tar.
 alcohol-*PHIL-PL*
 ‘These people are drunkards, drunkards with red noses.’
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.109)

Finally, the sociative suffix *-LI:N* is usually named “comitative” in existing grammatical descriptions and analyzed as a case suffix (Ubrjatova 1985: 122–124; Li 2011: 72; Artem'ev 2013b: 92–94). However, it can hardly be counted as a comitative case suffix in Dolgan for two independent reasons. First, the semantic role *accompaniment* is rather expressed by the postposition *gitta ~ kitta* ‘with’ in Dolgan (see Section 3.7). Therefore, the suffix *-LI:N* in Dolgan—in contrast to Sakha—is quite restricted. While this alone does not disqualify it from being a case suffix, it neither behaves like a case suffix from a morphological point of view since it may occur together with other case suffixes like in (929).

- (929) [...], *ojun-narin ill-en ke:s-ti-ler*
 shaman-*POSS.3PL.ACC* take.away-*CVB.SEQ* throw-*AUX-PST1-3PL*
d'ünjür-dü:n-ü.
 shaman.drum-*SOC-ACC*
 ‘[Well, having talked it over], they brought away the shaman together with [his] drum.’
 (BeAM_199X_HumanInLandOfDeath_flk.185)

Following Arkhipov (2009), *comitative* and *sociative* are very closely related categories. However, a distinguishing feature of the sociative is that the set of referents included is necessarily perceived as a unity; this may also be

¹ Thanks are due to Valentin Gusev who proposed this denomination to me.

the case in comitative constructions but is no prerequisite for it (Arkhipov 2009: 228). In Dolgan, a comitative meaning is frequently expressed with the postposition *gitta ~ kitta* ‘with’ (see Section 3.7 for details), but the sociative is expressed with the suffix -LI:N. In example (929), it can be derived from world knowledge that a shaman and his drum belong together. This analysis is in line with observations made by Stachowski (1995) and can be supported further. In example (930), the cat is inside the box, and in example (931), the girl has the clothes on. Thus, in either case, the referents form a unity.

- (930) *Koriŭpka-ni kuŭska-li:n-i biēr-dek-kine, keps-tē-m.*
 box-ACC cat-SOC-ACC give-COND-2SG tell-FUT-1SG
 ‘If you give [me] the box with the cat [in it], then I’ll tell.’
 (ErSV_1964_WarBirdsAnimals_flk.265)

- (931) [...], *gini hir-ge taŋas-ti:n utuj-ar.*
 3SG.PRO floor-DAT/LOC clothes-SOC sleep-PRS.3SG
 ‘[Only Anys freezes], she sleeps on the floor with clothes on.’
 (AkEE_19900810_GirlAnys_flk.014)

Following these examples and considerations, I believe that the suffix -LI:N in Dolgan must be regarded as a nominal derivational suffix and named *sociative* instead of the traditional name *comitative*. From a broader turcological perspective, it is worth mentioning that the status of -LI:N and its discrimination against the postposition *gitta ~ kitta* is a diagnostic criterion to single out Dolgan from Sakha.

12.1.2 Noun > Adjective

There are a couple of derivational suffixes in Dolgan, which form adjectives from nouns. Chart 195 summarizes them.

The propriative suffix -LA:K is the most widespread adjectival derivational suffix in Dolgan. It derives adjectives from nouns, denoting that something has a particular property or characteristic, e.g. *öjdö:k* ‘clever’ < *öj* ‘mind’ or *d’illa:k* ‘years old’ < *d’il* ‘year’. In many cases, the derived adjectives have lexicalized, e.g. *ti:nna:k* ‘alive’ = ‘having breath’ < *ti:n* ‘breath’. The counterpart of propriative adjectives are caritive adjectives, i.e. adjectives denoting that a referent lacks a certain quality. In contrast to propriative adjectives, they are not formed by a single suffix in Dolgan, but by the combination of the general possessive suffix -(t)A and the negative existential noun *hūōk*, e.g. *kū:h-e hūōk* ‘power-POSS NEG.EX’ = ‘weak’ and *kiāg-a hūōk* ‘ability-POSS NEG.EX’ = ‘incapable’ (Siegl 2020:

CHART 195 Denominal suffixes forming adjectives

Suffix	Function
-LA:K	propriative
-GI	locative/temporal adjectivizer
-TA:gI	locative adjectivizer
-LI:	similative

270–271). Diachronically, -(t)A can probably be related to the third-person singular possessive suffix (Ubrjatova 1985: 127–128). Still, from a synchronic point of view, it appears more felicitous to call it a “general possessive suffix” in the given domain since it has lost its person-number reference.

Besides building propriative adjectives, the suffix -LA:K occurs in a handful of domains connected only loosely to the derivation of adjectives. First, predicative possessive constructions are based on propriative adjectives marked with -LA:K (see Section 8.2.4 and Däbritz (2018b) for details).

(932) *Er kihi kördük, ani bari-kart-tara hîlîja-la:k-tar.*
man human like now all-DIM-POSS.3PL trousers-PROPR-3PL
‘Like men, now they [= women] all have trousers.’
(KiPP_2009_Belief_nar.KiPP.009)

Second, the propriative suffix can be used to coordinate noun phrases (see Section 7.1.4 for details).

(933) *Bîlîr ogonn’or-do:k eme:ksin olor-but-tar.*
earlier old.man-PROPR old.woman live-PST2-3PL
‘Earlier, there lived an old man and an old woman.’
(YaP_1930_GroomFromUpperWorld_flk.001)

Third, the suffix -LA:K can form associatives, i.e. denote a person and a group of people belonging to this person, like in (934) and (935).

(934) *Onton harsîŋgi-tin Nata-la:k kel-bit-tere.*
then next.morning-POSS.3SG.ACC Nata-PROPR come-PST2-3PL
‘Then in the next morning, Nata[sha] and her family came.’
(AnIM_AnMSp_2009_Holiday_conv.AnMSp.019)

- (935) *Te:te-ŋ-ŋe:k*, *Tumuččut-ta:k*.
 father-POSS.2SG-PROPR Tumuchut-PROPR
 ‘Your father and his family, Tumuchut and his family.’
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.169)

Finally, the propriative suffix forms one of the three necessitative moods in Dolgan. Thereby, it is attached to either the present or the future participle (see Section 6.5.7 for details and examples).

The adjectivizing suffixes -GI and -TA:gi behave similarly but not identically. -GI forms both temporal and locative adjectives, and it can be attached to nouns and adverbs, cf. *hajin-ŋi* ‘summerly; in summer’ < *hajin* ‘summer’ or *bügün-ŋü* ‘today’s’ < *bügün* ‘today’. Note that, in contrast to, e.g. Oghuz Turkic languages, the suffix cannot be attached to inflected nouns. Example (936) illustrates the use of the suffix -GI in Dolgan.

- (936) *Harsin-ŋi* *kün-ü* *kör-ör* *gini*.
 tomorrow-ADJZ day-ACC see-PRS.3SG 3SG.PRO
 ‘He sees tomorrow’s day [= He can see very well].’
 (AsKS_19XX_Amulet_nar.220)

The suffix -GI also plays a role in the self-domination of the different Dolgan groups (see Section 1.5.4).

ühe:giler ‘Upper Dolgan people’ (< *ühe* ‘up; at the top’)
ortoku:lar ‘Middle Dolgan people’ (< *orto* ‘middle’)
allara:gilar ‘Lower Dolgan people’ (< *allara* ~ *allara*: ‘lower part; lower course of a river’)

The adjectivizing suffix -TA:gi forms locative adjectives like in example (937).

- (937) *Haka* *kihi-te* *e-te*, *Katirik-ta:gi* – [...].
 Dolgan human-POSS.3SG be-PST1-3SG Katyryk-ADJZ
 ‘It was a Dolgan person, from Katyryk—[Yekaterina Yegorovna Bolshakova’s brother].’
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.017)

Its form is worth commenting on since two suffixes appear to be amalgamated here. According to Stachowski (1997: 31) and Johanson (2021: 493), Dolgan -TA:gi is cognate with, e.g. Ottoman Turkic *-daki* and Turkmen *-dAkI*, being a combination of the locative case suffix *-DA and the derivational suffix *-KI(n).

However, vowel length is a problem to this explanation since neither the Proto-Turkic locative case suffix *-DA (Johanson 2021: 466) nor its reflex in Dolgan -TA (here as partitive case, see Section 4.2.2.4) exhibit a long vowel that would explain the present Dolgan form -TA:gl. Therefore, I assume that analogy to the propriative suffix -LA:K (see above) yields the diachronically unexpected long vowel. Additionally, one endonym used by Dolgans, *tîâta:gi*, is formed with this adjectivizing suffix: *tîâ* ‘(forest) tundra’ + -TA:gl.

The similative suffix -LI: is quite universal in its derivational properties, forming adjectives but also adverbs (see Section 3.6). Besides that, it is homonymous with the suffix forming distributive numerals (see Section 3.4.3). It expresses the similarity of the referent to another referent or another class of referents.

- (938) [...], *unta:jka-bin* *onto haka-li:* *urba:ki-bin*
 fur.boots-POSS.1SG.ACC then Dolgan-SIM shirt-POSS.1SG.ACC
bîêr-bit-im, [...].
 give-PST2-1SG
 ‘[I handed in a cap with beads], I handed in fur boots and a shirt in
 Dolgan style, [then I gave a collar to an exhibition].’
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.091)

12.1.3 *Adjective > Noun*

The derivation of nouns out of adjectives is very infrequent in Dolgan, and productive derivational suffixes are hard to find. This restriction may be due to the weak morphological status of adjectives (cf. Section 3.2). In the analyzed material, the only true example of a noun, derived from an adjective via suffixation, is formed with the agent noun suffix -ČIt.

- (939) *Itirik-sit-ter*.
 drunk-AGN-PL
 ‘[They are] drunkards.’
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.105)

More often, nouns are derived from adjectives by means of conversion, e.g. *karaja* ‘darkness’ < *karaja* ‘dark’. In other words, the lexemes can be either adjectives or nouns, the disambiguation being made in the respective morpho-syntactic context.

12.1.4 *Adjective > Adjective*

The derivation of adjectives from other adjectives follows in many respects the patterns described in Sections 12.1.1 and 12.1.2. Once more, this can be explained by the weak morphological status of adjectives in Dolgan. However, some peculiarities of adjectival derivation from adjectives deserve a special mention.

The diminutive suffix *-kA:N* is also used in this domain but with a slightly different function. Instead of expressing the smallness of the referent, the suffix intensifies the quality described by the adjective.

- (940) *Min össüö küččügüj-ke:n e-ti-m.*
 1SG.PRO still small-INTS be-PST1-1SG
 'I was still very small.'
 (SuON_KuNS_19990303_HardLife_conv.SuON.009)

The suffixes *-LA:K*, *-GI* and *-TA:gI* fulfil the same function as in the derivation of adjectives from nouns (see Section 12.1.2). A very peculiar lexicalization shall be mentioned here: The word expressing 'czar' is formed by the adjective *ira:k* 'far' and the adjectivizing suffix *-TA:gI*, yielding the lexeme *ira:kta:gi*, literally probably best translated as 'the one [being] far away'.

Finally, adjectives can be intensified through reduplication. Thereby, the first syllable of the base adjective, or parts of it, is reduplicated and extended with either *-p* or *-bIs* (Stachowski 1997: 89). This yields forms like the following:

- toloru* 'full' > *tobus-toloru* 'very full; completely full'
iččitek 'empty' > *ibis-iččitek* 'very empty; completely empty'
karaŋa 'dark' > *kabis-karaŋa* 'very dark'
kara 'black' > *kap-kara* 'very black; jet-black'
kihil 'red' > *kíp-kihil* 'deep red'
če:lke: 'white' > *čebis-če:lke:* 'very white; snow white'
tögörük 'round' > *töp-tögörük* 'very round; perfectly round'
kira 'small' > *kíp-kira* 'very small; tiny'
teŋ 'similar; identical' > *tebis-teŋ* 'completely identical; not distinguishable'

An irregular but frequent form is *huōč-hogotok* ~ *huōs-hogotok* 'very lonely; one single' < *hogotok* 'lonely; single'. Following Stachowski (1997: 89), the irregular formation can be explained by the complex diachronic development of the base adjective itself, the description of which, however, goes beyond the scope of the present grammar. As was mentioned above, these reduplicated forms intensify the meaning of the base adjective as displayed in (941) and (942).

- (941) *Kabis-karaŋa, tūōk da: köstü-bet.*
INTS-dark what **INDF** be.visible-NEG.PRS.3SG
 ‘[There it is] completely dark, nothing is visible.’
 (PoNA_2004_MikaMukulajAloneAtHome_nar.030)
- (942) *Ol orto-tu-gar mas tur-ar, hūōč-hogotok*
 that middle-POSS.3SG-DAT/LOC tree stand-PRS.3SG **INTS-single**
mas.
 tree
 ‘In its middle [= of a valley], there stands a tree, one single tree.’
 (KiMN_19900417_Milkmaid_flk.165)

This derivational process is apparently unexpected regarding the morphological architecture of Dolgan. However, the phenomenon is widespread among the Turkic languages, cf. East Old Turkic *ap-ariŋ* ‘quite clean; very clean’ or Chuvash *χup-χura* ‘very black; jet-black’ (Johanson 2021: 501). The latter form is even etymologically cognate with Dolgan *kap-kara*. Consequently, it should not be considered a Dolgan innovation or peculiarity within the Turkic language family.

12.2 Verb > Nominal

There are two common nominalizing derivational suffixes in Dolgan, cf. Chart 196.

The suffixes **-I:** and **-s** behave similarly but are not entirely identical concerning both form and function. The suffix **-I:** is the most common nominalizer in Dolgan. It has neither formal nor semantic restrictions, i.e. it can be attached to all verbs in Dolgan. It is directly connected to consonant stems, whereby the usual morphonological processes (intervocalic voicing, the debuccalization *s* > *h* and vowel syncope; see Section 2.5) apply. When attached to vowel and diphthong stems, it replaces the stem-final vowel and diphthong, respectively. Semantically, the suffix **-I:** can simply nominalize a verb without changes in meaning, i.e. it forms action nouns like in example (943).

- (943) *Kül-s-ü:, kepset-i: būōl-an is-pit.*
laugh-COOP-ACTN chat-ACTN become-CVB.SEQ go.AUX-PST2.3SG
 ‘Laughter and chatting came up.’
 (PoNA_19900810_Tojo0Airplane_nar.022)

CHART 196 Deverbal suffixes forming nominals

Suffix	Function
-I:	action noun; nominalizer
-s	action noun

Initially, this derivation pattern is probably the base for all derivations with the suffix -I:. However, in many cases, these action nouns are also lexicalized and exhibit some shifts in meaning. In these cases, it is more precise to label the suffix simply as a nominalizer since the outcome is not necessarily an action noun anymore, as displayed in examples (944) and (945).

- (944) *Min bar-iāk-ta:k beje-m*
 1SG.PRO go-PTCP.FUT-NEC self-POSS.1SG
bul-u-ba-r.
 find-NMLZ-POSS.1SG-DAT/LOC
 'It's me who should marry my foundling.'
 (BaA_1930_OneEyedGirl_flk.023)

- (945) *Onton ulakan oks-oh-u: össüö bar ete* [...].
 then big beat-RECP-NMLZ still EX be-PST1-3SG
 'Then there was also a big battle [while crossing a river named Dnyepr].'
 (MiXS_1967_SoldierInSecondWorldWar_nar.048)

Finally, it should be mentioned that action nouns formed by the suffix -I: can form the base for further derivation with the agent noun suffix -ČIt (see Section 12.1.1), like in (946).

- (946) *Atak kirij-i-hit e-ti-m.*
 shoes cut-ACTN-AGN be-PST1-1SG
 'I was a shoe cutter.'
 (AkNN_KuNS_200212_LifeHandicraft_conv.AkNN.051)

The nominalizing suffix -s forms action nouns from depictive verbs ending with the verbalizing suffix -(I)j (see Section 12.3). As for their semantics, these verbs often express complex patterns of motions or details of body shape, e.g. *taraj-* 'lie on the back' or *kokoj-* 'have an upright back'. According to Artem'ev (2013b: 162–163), these verbs are onomatopoeic. The action nouns derived

from these verbs generally exhibit no change of meaning, e.g. *čekenij-* ‘roll’ > *čekenis* ‘rolling’. Nevertheless, there are some instances of lexicalized action nouns derived with this suffix, e.g. *kuōgas* ‘loon’ < *kuōga-s* ‘crane.neck-ACTN’ < *kuōgaj-* ‘crane one’s neck’ (Stachowski 1997: 49). In the analyzed material, the overwhelming majority of action nouns formed with -s occur together with the verb *gin-* ‘make’.

- (947) *Taba-lar-a* *meli-s* *gin-mit-tar*.
 reindeer-PL-POSS.3SG disappear-ACTN make-PST2-3PL
 ‘His reindeer disappeared.’
 (AsKS_19XX_Amulet_nar.075)

The function of this pattern, especially the difference to a synthetic form verb form like *melij-bit-ter* ‘disappear-PST2-3PL’, is unclear. According to the material analyzed here, it seems to be a kind of depictive expression of dynamic situations, to which the speaker is emotionally attached—similarly to English *It made boom!* describing an explosion or the like. As for its provenance, the suffix -s is of Mongolic origin, and the combination of the resulting action nouns with the verb *gin-* ‘make’ is a calque from Mongolic (Kałużyński 1961: 114–116).

12.3 Nominal > Verb

There are many derivational suffixes in Dolgan that form verbs from nominals (i.e. from nouns, adjectives and numerals). Two of them, -A: and -(I)j, are diachronically of great importance since they influence the (mor)phonological shapes of verbal stems (see Section 6.1 as well as Károly 2009 for details). They form the base for verbs like *aha:-* ‘eat’ (< *as* ‘food’) or *hitij-* ‘smell’ < *hit* ‘smell; odour’, respectively. Synchronically, these suffixes are not productive anymore.

The most common and frequent denominal verbal suffix in Dolgan is -LA:, together with its extended variants -LAN, -LAS and -LAT. The simplex form -LA: forms verbs from nouns, which often have the meaning ‘deal with X’, ‘be occupied with X’.

- (948) *Ust’-Avam kihi-ler-e,* *e: e, ogonn’ot-tor*
 Ust-Avam human-PL-POSS.3SG AFF eh old.man-PL
ologyko-lo:-čču *e-ti-lere*.
 tale-VBZ-PTCP.HAB AUX-PST1-3PL
 ‘People from Ust-Avam, yes, eh, the old men used to tell tales.’
 (ElBK_KuNS_2004_Storytellers_conv.ElBK.002)

- (949) *La:jku ča:j-da:-bit.*
 Laajku **tea-VBZ-PST2.3SG**
 'Laajku drank tea.'
 (BeVP_1970_Laajku_flk.046)

When attached to nouns denoting animals, the suffix -LA: forms captative verbs.

- (950) *Kihin bajgal-ga d'ura:k-tar bōlū:ge-le:-čči-ler.*
 in.winter sea-DAT/LOC Nenets-PL **beluga-VBZ.CAPT-HAB-3PL**
 'In winter, the Nenets people used to hunt belugas on the sea.'
 (BaA_1930_OneEyedGirl_flk.002)

From a formal point of view, it is important to note that the suffix is often shortened to -L due to regular morphonological processes when certain verbal suffixes are added. A persistent case is the present participle and present tense suffix -I:r (see Section 6.3.1.1).

- (951) *Ile, ilī-lerin tut-an hejro-l-ut-lar, [...].*
 indeed hand-POSS.3PL.ACC hold-CVB.SEQ **Hejro-VBZ-PRS-3PL**
 'Exactly, holding each other's hands, they are dancing the Hejro, [they lay down the driving poles, they stick the driving poles into the earth].'
 (SuON_KuNS_19990303_HardLife_conv.SuON.092)

Finally, although not being a morphological derivation of verbs from nominals, two further functions of the suffix -LA: shall be mentioned here. On the one hand, it is used for integrating Russian loan verbs into Dolgan speech (see Section 11.2.2.2 for details).

- (952) *Dud'inka-ttan napravl'aj-da:-čči e-ti-lerē.*
 Dudinka-ABL **relocate-VBZ-PTCP.HAB AUX-PST1-3PL**
 'They [= teachers] were relocated from Dudinka.'
 (BeEI_KuNS_1998_Teacher_conv.BeEI.093)

On the other hand, the suffix -LA: forms a placeholder verb from the interrogative pronoun *kim* 'who' (see Sections 3.5.5, 10.4 and Däbritz 2018a).

Regarding their form and origin, the suffixes -LAN, -LAS and -LAT are combinations of the verbalizer -LA: with the reflexive/middle suffix -(I)n, the reciprocal suffix -(I)s, and the causative suffix -t, respectively. The suffix -LAN, thus, forms verbs with a reflexive or middle meaning like in the examples (953) and (954).

- (953) *Ūon agis-pi-ttan ogo-lom-mut-um min.*
 ten eight-POSS.1SG-ABL child-VBZ.MID-PST2-1SG 1SG.PRO
 'Since I was eighteen, I was giving birth.'
 (KiPP_KuNS_200211_LifeChildren_conv.KiPP.058)
- (954) *Manna čaj-dam-mit-tar, kūös-ten-el-ler.*
 here tea-VBZ.MID-PST2-3PL meal-VBZ.MID-PRS-3PL
 'Here, they prepared tea and food [for themselves].'
 (MiAI_1964_OldPeasantOldWoman_flk.142)

Stachowski (1997: 58) correctly emphasizes that -LAN is not a further derivation from -LA: but has to be regarded as a suffix of its own since there are many cases where the -LAN-derivate semantically cannot be derived from the -LA:-derivate. A suitable example is *tabalan-* 'ride a reindeer; get reindeer' and *tabala:-* 'drive reindeer; pasture reindeer' (Stachowski 1997: 58). Apparently, the former verb is not simply the reflexive/middle derivation of the latter but a direct derivation from the noun *taba* 'reindeer'.

The suffix -LAS is formally a combination of the verbalizer -LA: and the reciprocal/cooperative suffix -(I)s. However, verbs derived with the suffix must be regarded as direct derivations from the base noun since a corresponding -LA:-derivate is often missing. The most frequent verbs derived with this suffix are *kömölös-* 'help' (< *kömö* 'help') and *heri:les-* 'fight [in a war]' (< *heri:* 'war').

- (955) *Min en'ê-ke kömö-löh-üö-m, [...]*
 1SG.PRO 2SG.PRO-DAT/LOC help-VBZ.RECP-FUT-1SG
 'I will help you, [I will make you a storeroom out of hay].'
 (ErSV_1964_WarBirdsAnimals_flk.027)
- (956) *E, olus heri:les-pit kihi e-t-e.*
 eh very war-VBZ.RECP-PTCP.PST human be-PST1-3SG
 'Eh, he was a man who fought a lot.'
 (PoNA_AkPG_1994_MPXarlampiev_nar.PoNA.008)

Finally, the suffix -LAT combines the verbalizer -LA: and the causative suffix -t. Based on the material analyzed here, it cannot finally be answered whether -LAT is to be classified as a suffix itself or a simple further derivation of -LA:. Stachowski (1997: 60) names the verb *külüktet-* 'make dark' (< *külüük* 'shadow'), which has no corresponding -LA:-derivate, and concludes that -LAT is to be regarded as a separate suffix. Since -LAT perfectly fits in the row together with -LAN and -LAS, this analysis is cautiously adopted here.

However, examples like (957) cannot finally support this claim; a separate analysis of the two suffixes (*olonko-lo-t-o:čču* ‘tale-VBZ-CAUS-PTCP.HAB’) would either be possible.

- (957) *Olonko-lot-o:čču* *e-ti-m* *onton*
 tale-VBZ.CAUS-PTCP.HAB AUX-PST1-1SG then
illa-t-a:čči *e-ti-m,* [...].
 sing-CAUS-PTCP.HAB AUX-PST1-1SG
 ‘I made [them] tell tales, then I made [them] sing, [then there are also
 drunken whatchamacallit, songs].’
 (ElBK_KuNS_2004_Storytellers_conv.ElBK.056)

12.4 Verb > Verb

The number and frequency of deverbal verbal suffixes in Dolgan are high. In a first step, they can be divided into two major groups: The first group changes the valence of a given verb, forming causatives, passives and alike (see also Section 7.3.2); the second group expresses actionality, i.e. those suffixes are concerned with the internal phase structure of the event referred to. Besides that, two suffixes are used to integrate Russian loan verbs into Dolgan. Chart 197 gives an overview of the suffixes in the material analyzed here.

Within the group of valence-changing or valence-oriented suffixes, causatives, passives, reflexives, middles, and reciprocals can be distinguished. Causatives are formed with the suffixes *-t*, *-(A)r*, *-TAr*, *-IAr* and *-InnAr*. The former three suffixes occur much more often than the latter two. Causatives increase the valence of a verb by one. In many cases, the derived causative verb is lexicalized, e.g. *ölör-* ‘kill’ < *öl-ör-* ‘die-CAUS’. Nevertheless, the named causative suffixes are all productive and do not seem to exhibit any restrictions in their usage.

- (958) *Tiā* *hir-bin* *mūōra-bin*
 tundra land-POSS.1SG.ACC tundra-POSS.1SG.ACC
öjdö-t-ör.
 remember-CAUS-PRS.3SG
 ‘It [= a poem] makes [me] remember my tundra land, my tundra.’
 (PoTY_2009_Song_sng.007)

CHART 197 Deverbal suffixes forming verbs

Suffix	Function
Valence-changing	
-t	causative, passive
-TAr	causative, passive
-(A)r	causative
-IAr	causative
-InnAr	causative
-(I)lIN	passive, reflexive, middle
-(I)n	reflexive, middle
-(I)s	reciprocal, cooperative, assistive
Actionality	
-AlA:	iterative
-IAIA:	iterative
-A:ktA:	iterative, emotional
-ItAlA:	distributive
-AttA:	distributive
-TA:	distributive
-ŋnA:	iterative, semelfactive
-BAktA:	accelerative
-msIj	momentaneous
Integration of Russian loans	
-LA:	integration of Russian loan verbs
-LAN	(integration of Russian loan verbs)

- (959) *Ma-ni kine:s hette talag-i kör-dör-ör.*
 that-ACC prince seven wicker-ACC **see-CAUS-PRS.3SG**
 'There, the prince shows him seven wickers.'
 (BaRD_1930_DaughterOfUrungAjyy_flk.013)

- (960) *Onton düō d'aktar-i tur-ūōr-ar,* [...].
 then MOD woman-ACC **stand.up-CAUS-PRS.3SG**
 'Then she [= the midwife] makes the woman stand up, [from the bed-
 ding where she was lying in the birth tent].'
 (SuAA_20XX_Birth_nar.081)

The causative suffixes *-t* and *-(A)r* call for comments regarding their morphonological behaviour. As pointed out in Section 2.3.2, the only permissible consonant clusters in the syllable coda in Dolgan are *-lt* and *-rt*. When the causative suffix *-t* is attached to stems like *olor-* ‘live; sit (down)’ or *bul-* ‘find’, the verb stems *olort-* and *bult-* arise. If now a suffix beginning with a consonant is attached, a prohibited consonant cluster of three consonants emerges. Consequently, the middle element *-t* is deleted. However, its existence in the underlying structure can be proven since the suffix-initial consonant is voiceless. Thus, the underspecified form of the verb form in example (961) is *olor-t-BAT* (see Section 2.5.5). Additionally, the causative suffix *-t* shortens the stem-final vowel when attached to a vowel stem, e.g. *ahat-* ‘feed’ < *aha-* ‘eat’. The causative suffix *-(A)r* exhibits its vowel-initial allomorphs when added to consonant stems, e.g. *ölör-* ‘kill’ < *öl-* ‘die’, but only *-r*, when added to a vowel stem, e.g. *karba:r-* ‘make swim’ < *karba-* ‘swim’.

- (961) *Ehe-tin,* *ebe-tin* *ol*
 grandfather-POSS.3SG.GEN grandmother-POSS.3SG.GEN that
orun-u-gar *da* *olor-pot*
 bed-POSS.3SG-DAT/LOC EMPH sit.CAUS-NEG.PTCP.PRS
e-ti-lere.
 AUX-PST1-3PL
 ‘On the grandfather’s bed, on the grandmother’s bed, she was not even
 allowed to sit.’
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.043)

The suffixes *-t* and *-TAr* also derive passives, but more seldom than causatives.

- (962) *Moŋuj ira:kta:gi kör-dög-üne kihi-te*
 Monguj czar see-TEMP-3SG human-POSS.3SG
es-t-îhi, [...].
 defeat-PASS-PROB.3SG
 ‘When the czar Monguj saw that his people were going to be defeated,
 [he himself went towards [him]].’
 (ErSV_1964_WarBirdsAnimals_flk.125)
- (963) *Aga-m öl-ö:rü iŋir-tar-d-a, kömölöŋ-ön*
 father-POSS.1SG die-CVB.PURP call-PASS-PST1-3SG help-CVB.SEQ
kör.
 see.AUX.IMP.2SG
 ‘My father was called to die; try to help.’
 (BaRD_1931_OldManHaresPolarFoxes_flk.011)

This homonymy of passive and causative morphemes is not uncommon in Turkic languages (see Johanson 1991), nor in areally close language families such as Tungusic or Mongolic (see Robbeets 2007). However, the more frequent passive suffix in Dolgan is *-(I)lIN*.

- (964) *A dosko:-ŋ ü:j-ülün-neg-ine düô, [...].*
 and plank-POSS.2SG **fasten-PASS-TEMP-3SG MOD**
 ‘And when the plank is fastened, [when they fasten it with a string, it has a space in between].’
 (SuAA_20XX_Birth_nar.094)

The passive suffix *-(I)lIN* behaves morphologically in a noteworthy way. The vowel of the suffix can be syncopated, and the consonants assimilate to *-ll-*; see the discussion of vowel syncope and metathesis in Section 2.5.4. Consequently, it always applies when a further suffix is added, except suffixes starting with a coronal consonant (simple past *-TI*, conditional participle *-TAK*, conditional mood *-TAr*, third-person imperative *-TIn* and *-TInnAr*). (965) and (966) show two instances of the syncopated suffix.

- (965) *Min o-lor-go i:t-illi-bit-im – [...].*
 1SG.PRO that-PL-DAT/LOC **raise-PASS-PST2-1SG**
 ‘I was brought up by them, [an old man and an old woman].’
 (LaVN_KuNS_1999_FateOfANortherner_conv.LaVN.035)

- (966) *Taba-li: da ba:j-ill-ar ebit.*
 reindeer-SIM EMPH **tie-PASS-PRS.3SG EVID**
 ‘It [= an aircraft on the river] is tied up like a reindeer, apparently.’
 (PoNA_19900810_Tojo0Airplane_nar.034)

Closely related to passives, and not always clearly distinguishable from them, are reflexives and middles. Thus, it is not surprising that the suffix *-(I)lIN* is also used to form such verbs.

- (967) *Balig-i-nan ere i:t-ill-en olor-ol-lor.*
 fish-EP-INS only **feed-REFL-CVB.SEQ sit.AUX-PRS-3PL**
 ‘They feed themselves only with fish.’
 (AkEE_19900810_PearlBeard_flk.008)

- (968) *A:n ari-lli-bit-a.*
 door **open-MID-PST2-3SG**
 'The door opened.'
 (PoNA_2004_MikaMukulajAloneAtHome_nar.047)

The most frequent reflexive suffix in Dolgan is *-(I)n*, whereby *-n* is often assimilated to *-t* in relevant phonological environments (see Sections 2.5.3 and 2.5.4), which can lead to ambiguities with the causative-passive suffix *-t* (see above). Example (969) displays a reflexive formed with *-(I)n* exhibiting no assimilation; example (970) shows a reflexive formed with *-(I)n* showing assimilation. The vowel-initial allomorphs are attached to consonant stems, whereas the allomorph *-n* is connected to vowel stems. In the latter case, a stem-final vowel is shortened, as shown in example (969), cf. the lexicon form *belemne:- ~ belemne:-* 'prepare'.

- (969) *J.D. belenne-n-er ulakan munn'ak-ka.*
J.D. prepare-REFL-PRS.3SG big gathering-DAT/LOC
 'Jegor Dmitrievich prepares himself for the big gathering.'
 (PoNA_19910207_Fishing_nar.022)
- (970) *Hirga-ti-ttan ka:l-im-a:ri tut-tu-but tinj*
sledge-POSS.3SG-ABL stay-NEG-CVB.PURP hold-REFL-PST2.3SG firm
bagaj-dik.
very-ADVZ
 'To not stay back from his sledge, he held very fast onto [it].'
 (AsKS_19XX_Amulet_nar.063)

Additionally, the suffix *-(I)n* can form middle verbs. Middle verbs formed with *-(I)n* have two readings in Dolgan: Either there is no agent performing the given action, or the agent performs the given action for their own benefit. In the former case, the verb's valence is decreased, but in the latter case, it is not. However, since these two groups formally belong together in Dolgan, they are described here in the same context. From a morphonological point of view, the suffix behaves like the homonymous reflexive suffix, i.e. *-n* can be assimilated to *-t*. Example (971) displays a middle verb in common sense, and the given event lacks an agent or causer. The examples (972) and (973) demonstrate the secondary reading of middle verbs; in either case, the agent performs the given action for their own benefit.

- (971) *Li:bira koju: hîâ-ta tog-un-n-a.*
 Lyybyra viscous fat-POSS.3SG **pour.out-MID-PST1-3SG**
 'Lyybyra's viscous fat leaked out.'
 (PoS_PrG_1964_Lyybyra_flk.045)
- (972) *As-tarin kat-ar-in-al-lar.*
 food-POSS.3PLACC **get.dry-CAUS-MID-PRS-3PL**
 'They dry their food for themselves.'
 (BoND_1964_ThreeBrothers_flk.019)
- (973) *D'aktar uraha d'îe-lerin tut-t-al-lar.*
 woman pole tent-POSS.3PLACC **build-MID-PRS-3PL**
 'The women build up their pole tents.'
 (PoNA_19910207_Fishing_nar.009)

Finally, the suffix *-(I)s* forms reciprocals, cooperatives and assistives. Its vowel-initial allomorphs are attached to consonant stems, whereby, however, the suffix vowel may be syncopated. In example (974), the allomorph *-is* is attached to the stem *il-* 'take', but given the following vowel-initial participle suffix *-Ar*, the emerging stem is *ils-* instead of *ilis-* (see Section 2.5.4 for a description of vowel syncope). The allomorph *-s* is attached to vowel stems, whereby a stem-final vowel is eventually shortened, e.g. *hübeles-* 'consult: discuss' < *hübele:-* 'advise'. Analogically, the verb *dîe-* 'say' yields *des-* 'talk (to each other)'. In intervocalic position, *-s* changes to *-h* (see Section 2.5.2 and example (976)). Reciprocals (974) express that two or more participants perform the same action on each other, i.e. they are agent and patient simultaneously. Cooperatives (975) describe that two or more participants act together. Assistives (976) express that one or more person(s) help another person perform an action.

- (974) *Onno kepset-el-ler il-s-al-larin,*
 there chat-PRS-3PL **take-RECP-PTCP.PRS-POSS.3PLACC**
il-si-bat-tarin.
take-RECP-NEG.PTCP.PRS-POSS.3PLACC
 'There they discuss, whether they take each other or not.'
 (ErTS_AkPG_1994_AAPopov_nar.ErTS.093)

- (975) *Bihigi ira:ktɑ:gɪ-gɑ üŋ-s-üögüŋ, üh-üön*
 1PL.PRO czar-DAT/LOC complain-COOP-IMP.1PL three-COLL
huruj-üögüŋ.
 write-IMP.1PL
 'Let us complain at the czar together, let the three of us write [him].'
 (SaSS_1964_NganasanBraveBoy_flk.080)
- (976) *D'aktar-i-gar ogo hu:j-uh-ar.*
 woman-POSS.3SG-DAT/LOC child wash-ASST-PRS.3SG
 'He helps his wife to wash the child.'
 (MiAI_1964_OldPeasantOldWoman_flk.028)

The second group of deverbal verbal suffixes expresses actionality (in other terminology: *Aktionsart*, lexical aspect, or situation aspect). It is important to note that these suffixes are concerned with the event's internal phase structure, not with the perspective of how the event is viewed (see Boogaart 2004 for a concise discussion of the notions of aspect and actionality).

The suffixes -AlA:, -lAlA:, -A:ktA:, -ItAlA:, -AttA:, and -TA: form verbs that express the plurality of events.² Verbs formed with the suffixes -AlA:, -lAlA: and -A:ktA:, can be subsumed under the cover term *iterative*. The essential characteristic of iteratives is that they express multiple events, i.e. the repetition of an event (Comrie 1976: 42; Plungian 2010: 220–221). As terminology is diverse and sometimes confusing, a short comment is necessary here. In this work, no difference is made between *iterative* and *frequentative*. According to Bybee et al. (1994: 160), the difference between iteratives and frequentatives is that the former express events repeated on a single occasion, whereas the latter express events repeated at different occasions. However, the Dolgan material analyzed here could not yield any support for this approach; all named suffixes would be both iterative and frequentative in Bybee et al.'s sense. Therefore, the term *iterative* is chosen for all of them. Note that Stachowski (1997: 67) also states for a range of these suffixes that they could be labelled either *frequentative* or *iterative*. Since the latter term is probably more common in general linguistics and typology, it is chosen here. The examples (977) to (979) show classical iteratives formed with -AlA:, -lAlA: and -A:ktA:, respectively.

2 See also Corbett (2000: 243–263) for a theoretical and typological discussion of this phenomenon, called *verbal number* by him.

- (977) *Ījit-al-i:l-lar, ĵjit-al-i:l-lar.*
 ask-ITER-PRS-3PL ask-ITER-PRS-3PL
 ‘They [= policemen] are questioning [him], they are questioning [him].’
 (ChGS_UoPP_20170724_SocCogDesc_conv.ChGS.159)
- (978) *A bihigi bu d’ġegi-tten emiê it-ġāla-h-a-bit.*
 and 1PL.PRO this side-ABL also shoot-ITER-COOP-PRS-1PL
 ‘And we are also shooting from this side.’
 (ChVD_AkEE_198204_SoldierInWar_nar.ChVD.093)
- (979) *Kuhagan kî:s ogo-lo:k-pun, ol ūōret-e:kt-i:r.*
 small girl child-PROPR-1SG that teach-ITER-PRS-3SG
 ‘I have a little daughter, she teaches me constantly.’
 (PoMA_1964_YoungCzar_flk.100)

Interestingly, the suffix -A:ktA: is also used in contexts where no iterative reading is available. In these contexts, -A:ktA: instead seems to convey the speaker’s emotional attitude, e.g. surprise, anger, or disappointment, towards the event going on. In example (980), a human gets lost in the lower world and desperately searches for a way out. Now some inhabitants of the lower world, who had captured him, fall asleep, and he does not know what to do, where to go. An iterative reading can, thus, be excluded here.

- (980) *Ol kihi kajdiêk bar-a:kt-ġag-a=j?*
 that human whereto go-EMOT-FUT-3SG=Q
 ‘Where shall this man go, though?’
 (BeAM_199X_HumanInLandOfDeath_flk.187)

The suffixes -ItAlA:, -AttA: and -TA: form distributive verbs. Like iterative verbs, they describe multiple events, but in the case of distributive verbs, necessarily more than one subject or more than one object is involved (Comrie 1976: 23; Plungian 2010: 220–221). Example (981) shows a distributive verb with multiple subjects; example (982) shows a distributive verb with multiple objects.

- (981) *Onton elbek-elbek hir-ten kel-itele:-bit-ter onno.*
 then many-many place-ABL come-MULT-PST2-3PL thither
 ‘They came there from many, many places.’
 (UkOA_2010_Festival_nar.UkOA.034)

- (982) *Kergen a:ji-ttan kim kird'agas-tar-in*
 family at.every-ABL who old-PL-POSS.3SG.ACC
il-atta-bit-tara.
take-MULT-PST2-3PL
 'From each family, the old people were taken.'
 (BeES_1997_HistoryOfKatyryk_nar.052)

The suffix -ɲnA: forms iterative verbs again. However, the interval of iteration is seemingly much shorter than in the case of -ALA:, -IALA: and -A:ktA:. Stachowski (1997: 75) calls these verbs *rhythmic iteratives*, primarily derived from depictive verbs ending with -j.

- (983) *Kaja:, kör-ör,*
 hey see-PRS.3SG
kanta-ɲn-ɪ:kanta-ɲn-ɪ: köp-püt-e.
raise.head-ITER-CVB.SIM-raise.head-ITER-CVB.SIM run-PST2-3SG
 'Hey, it [= a fox] looks, it was running, constantly raising the head.'
 (UkET_2002_FoxJayBuzzard_flk.011)

Additionally, the suffix -ɲnA: can form semelfactive verbs, i.e. describing one short-running single event. These verbs are also mainly formed from verbs ending with -j, in this case, with intrinsic iterative or durative semantics.

- (984) *Ūot-a pr'ama burga-ɲn-ɪ:r agaj, [...].*
 fire-POSS.3SG directly rise-SEM-PRS.3SG suddenly
 'The fire flames up at once, [aha, like that it was].'
 (BeAM_199X_HumanInLandOfDeath_flk.089)

The suffix -BAktA: forms verbs, which according to Ubrjatova (1985: 151), express the *uskoritelnyj vid* 'lit. accelerating aspect'. In the material analyzed here, there are a few instances of such verbs. Indeed, the verbs formed with -BAktA: describe quick, eventually accelerating events, i.e. they express accelerative actionality.

- (985) *Kine:h-e če, noliŭg-un karči-tin*
 prince-POSS.3SG PTCL tax-POSS.3SG.GEN money-POSS.3SG.ACC
il-a kel-bekte:-tin bert muŋ türge-nik
 take-CVB.SIM come-ACCEL-IMP.3SG very most quick-ADVZ
dîe-n huruj-ar.
 say-CVB.SEQ write-PRS.3SG

‘The prince wrote to him that he should come as fast as possible to receive his money for the taxes.’

(SaSS_1964_NganasanBraveBoy_flk.103)

The suffix -mslj forms momentaneous verbs but rarely occurs; nevertheless, an example is given here.

- (986) *lra:ktɑ:gi it uōl-un mo:j-u-ttan*
 czar dog son-POSS.3SG.ACC neck-POSS.3SG.ABL
ku:h-an il-bit ita-msij-a
 embrace-CVB.SEQ take.AUX-PST2.3SG cry-MOM-CVB.SIM
tüh-en baran d'îe-bit: [...]
 fall-CVB.SEQ after say-PST2.3SG
 ‘The czar embraced the dog’s son, broke out in tears and said: [“From today it’s your destiny to be a czar”].’
 (ChPK_1970_ThreeBoys_flk.112)

Finally, in the context of suffixes expressing actionality, it sparks the eye that there are many iterative and distributive suffixes, but not a single suffix forms duratives or inchoatives. This distribution can be explained by the fact that the latter actionalities are expressed by the postverbal constructions in Dolgan, described in detail in Section 6.4.9.

The third group of deverbal verbal suffixes in Dolgan consists of the verbalizing suffixes -LA: and -LAN (see Section 12.3). These suffixes are attached to Russian verb stems to integrate them into the Dolgan morphosyntax, whereby the former suffix occurs much more often than the latter. The exact patterns of this process are explained in Section 11.2.2.2.

Sample Texts

13.1 Text 1: *The Reindeer and the Mouse*

The text at hand is a fairytale, told by the Dolgan poetess Evdokija (Ogduō) Egorovna Aksēnova on the Dolgan radio in 1990, representing the Upper Dolgan dialect. In the INEL Dolgan Corpus, the text has the code *AkEE_19900810_ReindeerMouse_flk* and is linked to the corresponding audio file.

- (1) *Kutujag-i kitta taba.*
mouse-ACC with reindeer
'The mouse and the reindeer.'
- (2) *Birde kutujak taba-ni kör-ön diē-bit: "Taba,*
once mouse reindeer-ACC see-CVB.SEQ say-PST2.3SG reindeer
kisten-el-e o:nn'-uōk".
hide-ITER-CVB.SIM play-IMP.1DU
'Once the mouse saw the reindeer and said: "Reindeer, let's play hide and seek"'
- (3) *"O:nn'-uōk", uōr-büt taba.*
play-IMP.1DU be.happy-PST2.3SG reindeer
'"Let's play", the reindeer was happy.'
- (4) *"Maɲnaj en kisten", hübele:-bit taba.*
at.first 2SG.PRO hide.IMP.2SG advise-PST2.3SG reindeer
'"At first you hide", the reindeer advised.'
- (5) *"Min enigi-n körd-üō-m."*
1SG.PRO 2SG.PRO-ACC search-FUT-1SG
'"I will search for you."'
- (6) *Taba kisten-n-e.*
reindeer hide-PST1-3SG
'The reindeer hid.'

- (7) *Töhö da buöl-bakka kutujak körd-ü:*
 how.much INDF be-NEG.CVB.SIM mouse search-CVB.SIM
bar-bit.
 go-PST2.3SG
 'After a short time, the mouse went off to search.'
- (8) *Hir-i bari-tin tegelij-d-e, kanna da*
 earth-ACC all-POSS.3SG.ACC go.around-PST1-3SG where INDF
bul-bat.
 find-NEG.PRS.3SG
 'The mouse went through the whole land, it found [it] nowhere.'
- (9) *Talak-ta:k hir-ge tij-d-e.*
 bush-PROPR place-DAT/LOC reach-PST1-3SG
 'It came to a bushy place.'
- (10) *Talak-tar ejmejñ-i:l-ler tiäl-tan, ikki talak kamna:-bat.*
 bush-PL move-PRS-3PL wind-ABL two bush move-NEG.PRS.3SG
 'The bushes are moving because of the wind, two bushes are not moving.'
- (11) *Kör-büt-e, taba muös-tar-a.*
 see-PST2-3SG reindeer antler-PL-POSS.3SG
 'It looked, [there are] the reindeer's antlers.'
- (12) *"Ani min kisten-iê-m", diê-bit kutujak, "en*
 now 1SG.PRO hide-FUT-1SG say-PST2.3SG mouse 2SG.PRO
kördö:."
 search.IMP.2SG
 '"Now I will hide", the mouse said, "you search"'
- (13) *Kutujak hür-en ka:l-l-a.*
 mouse run-CVB.SEQ stay.AUX-PST1-3SG
 'The mouse ran off.'
- (14) *Kisten-n-e.*
 hide-PST1-3SG
 'It hid.'
- (15) *Taba körd-ür, körd-ür, amattan bul-bat.*
 reindeer search-PRS.3SG search-PRS.3SG at.all find-NEG.PRS.3SG
 'The reindeer searches and searches, it does not find [the mouse] at all.'

- (16) *Henîe ke baran-n-a.*
 power well end-PST1-3SG
 '[Its] power came to an end.'
- (17) *Ol ihin taba ani-ga dîeri hir-i*
 that because.of reindeer now-DAT/LOC until earth-ACC
hill-îr-hill-îr h-onon bu küñ-ŋe dîeri taba
 sniff-PRS.3SG-sniff-PRS.3SG EMPH-SO this day-DAT/LOC until reindeer
kutujag-i bul-bat.
 mouse-ACC find-NEG.PRS.3SG
 'Therefore, the reindeer is sniffing the earth until now, and so the reindeer
 does not find the mouse until today.'
- (18) *Olonko-lor-but-o Ogduō Aks'onova.*
 tale-VBZ-PST2-3SG Ogduo Aksënova
 'The tale was told by Ogduo Aksënova.'

13.2 Text 2: *Dolgan Birth Customs*

The text at hand forms a part of a narrative text about birth customs among the Dolgans. It was told by Antonina Alekseevna Suzdalova on the Dolgan radio in the 2000s, representing the Lower dialect of Dolgan. In the INEL Dolgan Corpus, the text has the code *SuAA_20XX_Birth_nar* and is linked to the corresponding audio file. Here the sentences 001 to 014 are given.

As for the transcription, it has to be remarked that it was not redacted, neither in the corpus itself nor in this grammar. Dolgan items in round brackets signal uncertainty concerning the transcription itself; the corresponding item in the free translation is marked with a question mark in round brackets.

- (1) *Bilir-gi ogo tör-ür-e togoho-go.*
 long.ago-ADJZ child be.born-PRS-3SG birth.pole-DAT/LOC
 'Earlier, children were born on a birth pole.'
- (2) *Togoho-go (ogo-lor-o) (ogo:-), îarakan d'aktar*
 birth.pole-DAT/LOC child-PL-POSS.3SG child pregnant woman
tör-ür kem-i-ger bilir-gi üje-tten
 give.birth-PTCP.PRS time-POSS.3SG-DAT/LOC long.ago-ADJZ time-ABL
togoho-nu belemne:-čči-ler.
 birth.pole-ACC prepare-HAB-3PL

‘On the birth pole the children, (the child), at the time of the pregnant woman’s birth, one prepared a birth pole earlier.’

- (3) *Tuspa uraha d'ie-ni tut-an-nar belemnē:čči-ler.*
 individually pole tent-ACC build-CVB.SEQ-3PL prepare-HAB-3PL
 ‘Building a pole tent separately, they prepared [it].’
- (4) *Ogo tör-ür d'uka:ta, törö:büt*
 child be.born-PTCP.PRS tent-POSS.3SG be.born-PTCP.PST
d'uka:ta, diē-čči-ler onton.
 tent-POSS.3SG say-HAB-3PL then
 ‘The tent of the child’s birth, a birth tent it was called.’
- (5) *Onno buōllagina o:l togoho-nu oŋor-o:čču-lar,*
 there though that birth.pole-ACC make-HAB-3PL
kerget-ter-e tur-ūr-al-lar.
 family-PL-POSS.3SG stand-CAUS-PRS-3PL
 ‘There, they made the birth pole, the family erected it.’
- (6) *Ehe-te du:, aga-ta du:, in'e-te du:*
 grandfather-POSS.3SG Q father-POSS.3SG Q mother-POSS.3SG Q
kömölöh-ön-nör, baj-al-lar togoho-nu uraha-ga
 help-CVB.SEQ-3PL tie-PRS-3PL birth.pole-ACC pole-DAT/LOC
ki:haj-i: tūdra mah-i.
 press-CVB.SIM across wood-ACC
 ‘The grandfather or the father or the mother are helping, they tie the birth pole to a pole, pressing it onto the wood.’
- (7) *Onton, e, togoho-tun uhug-u-gar dūō*
 then eh birth.pole-POSS.3SG.GEN end-POSS.3SG-DAT/LOC MOD
končo-čču ann'-ill-an tur-ar
 stand.upright-ADVZ push-PASS-CVB.SEQ stand-PTCP.PRS
(bah-a), e:, mas buōl-a:čči (uraha-ka:t-a).
 head-POSS.3SG eh wood be-HAB.3SG pole-DIM-POSS.3SG
 ‘Then, eh, at the end of the birth pole, there is such an upright standing piece of wood, a small pole(?)’

- (8) *Oččogo buōllagina ol togoho-ŋ buō*
 then though that birth.pole-POSS.2SG EMPH
tūōh-ün kura:g-i-nan buōl-α:čči.
 breast-POSS.3SG.GEN curve-POSS.3SG-INS be-HAB.3SG
 ‘And then the birth pole is along the bosom.’
- (9) *D’aktar onton ija:ll-an olor-on*
 woman then hang.up-PASS-CVB.SEQ sit.AUX-CVB.SEQ
ogo-lon-o:čču.
 child-VBZ-HAB.3SG
 ‘The woman is then hung up, and she gives birth.’
- (10) *Ol ogo-lon-or-un anni-ti-gar*
 that child-VBZ-PTCP.PRS-POSS.3SG.GEN lower.part-POSS.3SG-DAT/LOC
duō, e: olor-or hir-i-ger leke:
 MOD eh sit-PTCP.PRS place-POSS.3SG-DAT/LOC pieces.of.fur
buōl-α:čči.
 be-HAB.3SG
 ‘Under the birth, eh, on the sitting place, there are pieces of fur.’
- (11) *D’e, ol leke:ge duō ot buōl-α:čči.*
 well that pieces.of.fur-DAT/LOC MOD grass be-HAB.3SG
 ‘And on these pieces of fur, there is grass.’
- (12) *Ot-u u:r-α:čči-lar tu:m-u-gar, diē-n-ner.*
 grass-ACC lay-HAB-3PL relief-POSS.3SG-DAT/LOC say-CVB.SEQ-3PL
 ‘They lay the grass there for relief, it is said.’
- (13) *Onu-ga duō ogo tūs-teg-ine, “ot-u-gar*
 that-DAT/LOC MOD child fall-TEMP-3SG grass-POSS.3SG-DAT/LOC
tüh-er”, diē-čči-ler ol ihin, ot-to:k
 fall-PRS.3SG say-HAB-3PL that because.of grass-PROPR
ot-to:g-un ihin.
 grass-PROPR-POSS.3SG.GEN because.of
 ‘When the child falls onto it, they say “it falls onto the grass” because it is with grass.’
- (14) *“Ok-ko tūs-püt”, diē-čči-ler.*
 grass-DAT/LOC fall-PST2.3SG say-HAB-3PL
 ‘“It fell onto the grass”, they say.’

13.3 Text 3: *Discussing the Correct Order*

The following dialogue forms part of a conversation recorded in 2017 in Dudinka, the speakers being Galina Sidorovna Čuprina and Polina Prokop'evna Uodaj. The informants got the task to invent a story when looking at images, and after that, to put the pictures in the correct order (cf. the following link for a description of the experiment: <https://scopicproject.wordpress.com/run-the-task/>, last access: 01.03.2022). The images and the story are about a family man who, forced by his friends to drink alcohol, goes to the bad and finally ends up in jail because he has beaten his wife. In the INEL Dolgan Corpus, the conversation below matches the sentences ChGS.046 to ChGS.055 in the transcript *ChGS_UoPP_20170724_SocCogOrder_conv*, where it is linked to the corresponding audio file.

- (1) ChGS: *D'e bu ba:l-lar d-ir maɣnaj ülel-i:*
 well this EX-3PL say-PRS.3SG at.first work-CVB.SIM
hild'-an būō bu aragi:-msak-tar-a
 go-CVB.SEQ EMPH this alcohol-PHIL-PL-POSS.3SG
kim-ne:-bit.
 who.PH-VBZ-PST2.3SG
 'Well, here are these, to say, in the beginning, after he had gone to work and the drunkards whatchamacallit.'
- (2) ChGS: *Tübes-pit.*
 get.into-PST2.3SG
 'He came across them.'
- (3) UoPP: *Tak, onton nač'ala kajdiēk ba:r aragi:-msak*
 so.R then beginning whereto EX alcohol-PHIL
būōl-but-a.
 become-PST2-3SG
 'So, then the beginning, where did he become a drunkard?'
- (4) ChGS: *D'e bu ba:l-lar di.*
 well this EX-3PL EMPH
 'Well, here they are.'
- (5) UoPP: *E:, bu keps-i:r.*
 eh this tell-PRS.3SG
 'Eh, there he is telling.'

- (6) ChGS: *Bu ih-e olor-ol-lor.*
 this drink-CVB.SIM sit-PRS-3PL
 'Here they are sitting and drinking.'
- (7) ChGS: *Ih-e olor-or, onton bu keps-il-ler, gini*
 drink-CVB.SIM sit-PRS.3SG then this tell-PRS-3PL 3SG.PRO
kijjan-ar.
 get.angry-PRS.3SG
 'He is sitting and drinking, then they are telling, he is getting angry.'
- (8) ChGS: *Kijjan-an baran d'aktar-ga bar-ar, ol*
 get.angry-CVB.SEQ after woman-DAT/LOC go-PRS.3SG that
ba:r, egel o-nu.
 EX give.IMP.2SG that-ACC
 'Having gotten angry, he is going to the woman, there it is, give it.'
- (9) UoPP: *Tak, dva, tak da, d'aktar-ga bar-bit.*
 so.R two.R so.R yes.R woman-DAT/LOC go-PST2.3SG
 'So, two, so yes, he went to the woman.'
- (10) ChGS: *Kula:ki-tin belemne-m-mit.*
 fist.PL.R-POSS.3SG.ACC prepare-MID-PST2.3SG
 'He prepared his fists.'
- (11) UoPP: *"(Hit), ol kihi-ni gitta bugurduk hild'i-bik-kin",*
 lie.IMP.2SG that human-ACC with like.this go-PST2-2SG
d-ir.
 say-PRS.3SG
 '“Hey, you went like this with this man”, he says.'
- (12) ChGS: *Da, da, da, da, da.*
 yes.R yes.R yes.R yes.R yes.R
 'Yes, yes, yes, yes, yes.'
- (13) UoPP: *Onton oksu-but, onton m'il'is'ije-ler kel-bit-ter.*
 then beat-PST2.3SG then police-PL come-PST2-3PL
 'Then he hit her, then the policemen came.'

- (14) ChGS: *A tam üčügej, bu bar, ülel-i hild'-al-lar,*
 and.R there.R good this EX work-CVB.SIM go.AUX-PRS-3PL
olor-or e-ti-lereni, kör, bu
 live-PTCP.PRS AUX-PST1-3PL apparently see.IMP.2SG this
vm'est'e.
 together.R
 'And there it is good, here it is, they are working, they are living
 apparently, look, together.'
- (15) UoPP: *Aha, tak, tak, eš'o.*
 aha so.R so.R still.R
 'Aha, like that, and so.'
- (16) UoPP: *A vot et'i pasmatr'et' na:da.*
 and.R well.R these.R look.INF.R need.to.R
 'And we have to look at these.'
- (17) ChGS: *Bul, be:be.*
 find.IMP.2SG wait
 'Find [them], wait.'

13.4 Text 4: *We Hit the Road Again*

The following text forms part of the fifth chapter of Nikolaj Anisimovič Popov's novel *Avam biēs ürekterin üstün* 'Along the five rivers of Avam' (Popov 2011: 134–135). The glossing and the translation into English are my own. Since the text represents the literary Dolgan language, the original Cyrillic text is provided, too.

- (1) Кыһыл төгүрүк күммүт ыраак кайалар кэннилэригэр кистэммитэ.
Kihil tögürük küm-müt irak kaja-lar
 red round sun-POSS.1PL distant mountain-PL
kenni-leri-ger kistem-mit-e.
 back.part-POSS.3PL-DAT/LOC hide-PST2-3SG
 'The red and round sun hid far away behind the mountains.'

- (2) Үрэкпит ортотугар “Казанка” диэн ааттаакка луотка уһугугар улакан оҕуоктаак киһи – эһэм көстүбүтэ.

Ürek-pit orto-tu-gar “Kazanka” diē-n
 river-POSS.1PL middle-POSS.3SG-DAT/LOC Kazanka say-CVB.SEQ
a:t-ta:k-ka lūōtka uhug-u-gar ulakan
 name-PROPR-DAT/LOC boat end-POSS.3SG-DAT/LOC big
oṅūōk-ta:k kihi – ehe-m köstü-büt-e.
 bone-PROPR human grandfather-POSS.1SG be.visible-PST2-3SG
 ‘In the middle of the river, at the rear of his boat named “Kazanka”, a big bony human, my grandfather, was seen.’

- (3) Гини камнаарынан көстөр этэ, мотуорун үлэлэтэ хатыыра, онтута огонньору истибэт, хабуотталлыбат.

Gini kamna-n-ar-i-nan köst-ör
 3SG.PRO move-MID-PTCP.PRS-POSS.3SG-INS be.visible-PTCP.PRS
e-t-e, motuōr-un ülele-t-e
 AUX-PST1-3SG engine-POSS.3SG.ACC work-CAUS-CVB.SIM
hat-ir-a, on-tu-ta ogonn’or-u
 do.in.vain-PRS-3SG that-POSS.3SG-POSS.3SG old.man-ACC
isti-bet habuōt-ta-lli-bat
 hear-NEG.PRS.3SG worry-VBZ-REFL-NEG.PRS.3SG
 ‘From his movements, it could be seen that he was trying in vain to make his engine work, that one [= the motor] does not obey, it does not bother about.’

- (4) Гини мотуорун быатыттан күүстээктик тартагына, луотката тэһии табалыы ыстаңалаан, көбүҥнүүр этэ.

Gini motuōr-un biā-ti-ttan
 3SG.PRO engine-POSS.3SG.GEN cord-POSS.3SG-ABL
kū:s-te:k-tik tar-tag-ina, lūōtka-ta tehi:
 power-PROPR-ADVZ pull-TEMP-3SG boat-POSS.3SG anxious
taba-li: istaṅ-ala:n, köbü-ṅn-ür
 reindeer-SIM jump-ITER-CVB.SEQ emerge-ITER-PTCP.PRS
e-t-e.
 AUX-PST1-3SG
 ‘[Every time] when he tugged powerfully at his engine’s cord, the boat jumped up and down like an anxious reindeer.’

- (5) Илби һылайан, гини кытаанактык абалаһар этэ, мотуорун һәмэлээн бүппэт этэ.

Ilbi hilaj-an gini kita:nak-tik abala-h-ar

INTS be.tired-CVB.SEQ 3SG.PRO heavy-ADVZ scold-RECIP-PTCP.PRS

e-t-e, motuor-un hemele:-n

AUX-PST1-3SG engine-POSS.3SG.ACC rebuke-CVB.SEQ

büp-pet e-t-e.

stop-NEG.PTCP.PRS AUX-PST1-3SG

‘Having got very tired, he was scolding a lot, not stopping to rebuke his engine.’

- (6) Гини мээнэ һәмэлиир этэ, кайдак туолкулуогун.

Gini me:ne hemel-ir e-t-e, kajdak

3SG.PRO in.vain rebuke-PTCP.PRS AUX-PST1-3SG how

tüölkul-üög-un.

understand-PTCP.FUT-POSS.3SG.ACC

‘He was rebuking [it] in vain, [as if] it would understand.’

- (7) Ким эрэ кытылтан үөгүлээбитэ: “Мыкаа, луоткаң түтэгийгэр мотуорун уотун көрдөө.

Kim ere kitil-tan üögüle:-bit-e: “Mika: luotka-ŋ

who INDF shore-ABL shout-PST2-3SG Mykaa boat-POSS.2SG

tügeg-i-ger motuor-un üöt-un

ground-POSS.3SG-DAT/LOC engine-POSS.2SG fire-POSS.3SG.ACC

kördö.

search.IMP.2SG

‘Someone shouted from the shore: “Mykaa, look for the engine’s igniter on your boat’s ground.’

- (8) Бадага, алгас онно туһэрбитиң буолуо”.

Badaga, algas onno tuh-er-bit-iŋ buoluo.

apparently mistake there fall-CAUS-PST2-2SG probably

‘Probably, you have dropped it accidentally there’

- (9) Огонньор көнөтүк луоткатыгар турбута, кайдиэжиттэн киһилэр
һаҥалара иһиллэрин көрүлээри.

Ogonn'or könötük luotka-ti-gar tur-but-a,
old.man upright boat-POSS.3SG-DAT/LOC stand.up-PST2-3SG
kajdiēki-tten kihi-ler haṅa-lara
whither-ABL human-PL voice-POSS.3PL
iḥill-er-in körüle:-ri.
be.heard-PTCP.PRS-POSS.3SG.ACC look.around-CVB.PURP
'The old man stood upright in his boat to look around from where the
people's voice is heard.'

- (10) Гини дьүһүнэ кыйҕаммыт тыа күсээйинэ – эбэкээ көрдүк этэ.

Gini d'ühün-e kiyṅam-mit tīā
3SG.PRO appearance-POSS.3SG be.angry-PTCP.PST tundra
kūsejin-e – ebeke: kördük e-t-e.
lord-POSS.3SG bear like be-PST1-3SG
'His appearance was like the angry lord of the tundra, the bear.'

- (11) Гини арыттаак ханнылара үөһэ-аллара көбүөннүүр этилэрэ.

Gini arit-ta:k hanni-lar-a üöhe-allara
3SG.PRO space.between-PROPR shoulder-PL-POSS.3SG up-down
köbüö-ṅn-ür e-ti-lere.
emerge-ITER-PTCP.PRS AUX-PST1-3PL
'His broad shoulders were constantly moving up and down.'

13.5 Text 5: *Khatanga's School—90 Years*

The following text comes from the weekly newspaper “Taimyr”,¹ which regularly publishes one page of Dolgan articles. It was published on 30 November 2016, and is about the 90th anniversary of the school in the town of Khatanga. The glossing and the translation into English are my own. Since the text represents the literary Dolgan language, the original Cyrillic text is provided, too.

¹ <https://taimyr24.ru/gazeta/>, last access: 01.03.2022.

- (1) Хатанга ускуолата бэйэтин үчүгэй идэлэрин хүтэрбэт.
Khatanga uskuōla-ta beje-tin üčügej
 Khatanga school-POSS.3SG self-POSS.3SG.GEN good
ide-ler-in hüter-bet.
 habit-PL-POSS.3SG.ACC lose-NEG.PRS.3SG
 'The school of Khatanga does not lose its good traditions.'
- (2) Аны манна эжин техника толору: компьютердар, ноутбуктар, одуу доскалар.
Ani manna ejin texnika toloru: komp'juter-dar noutbuk-tar
 now here different technology full computer-PL notebook-PL
odu: doska-lar.
 miracle board-PL
 'Now it is full of various technology here: computers, notebooks, smart-boards (lit. magic boards).'
- (3) Һин да урукку дьыллары өйдөөтөккө, бэрт күүстээк учиталлар баар этилэрэ.
Hin da urukku d'il-lar-i öjdö:-tök-kö,
 however EMPH former year-PL-ACC remember-PTCP.COND-DAT/LOC
bert kü:ste:k učital-lar bar e-ti-lerc.
 very strong teacher-PL EX be-PST1-3PL
 'However, when remembering the former years, there were very strong teachers.'
- (4) Бу киһилэр ааттарын умнуо Һуоктаакпыт: [...].
Bu kiki-ler at-tarin umn-uō huōk-ta:k-pit:
 this human-PL name-POSS.3PL.ACC forget-PTCP.FUT NEG-NEG-1PL
 'We must not forget the names of these people: [...].'
- (5) Аныгы учиталлар урут үлэлээбит киһилери умнубаттар, гинилэр Һуолларынан бараллар.
Ani-gi učital-lar urut ülele:-bit kiki-ler-i
 now-ADJZ teacher-PL early work-PTCP.PST human-PL-ACC
umnu-bat-tar, giniler huōl-lari-nan bar-al-lar.
 forget-NEG.PRS-3PL 3PL.PRO trace-POSS.3PL-INS go-PRS.3PL
 'Today's teachers do not forget the people, who worked [there] formerly, they follow in their footsteps.'

- (6) Агыс дьылы ити ускуоланы Алла Ивановна Токаренко бастыыр.
Agis d'il-i iti uskuōla-ni A.I.T. bast-ir.
 eight year-ACC this school-ACC A.I.T. lead-PRS.3SG
 'For eight years, this school has been led by Anna Ivanovna Tokarenko (A.I.T.).'
- (7) Коллектив эгин хаҥа хүбэни таһааран иһэр.
Kollektiv ejin haŋa hūbe-ni taħa:r-an ih-er.
 staff different new advice-ACC take.out-CVB.SEQ go.AUX-PRS.3SG
 'The teaching staff constantly produces new ideas.'
- (8) Оголору, кэргэннэри, бииргэ комуйаннар, эгин оонньуулары, бэсэ-
 лээргэтэр мероприятиялары оҥороллор.
Ogo-lor-u, kergen-ner-i, birge komuj-an-nar, ejin
 child-PL-ACC parent-PL-ACC together gather-CVB.SEQ-3PL different
o:n'n'u:-lar-i, beselerge-t-er meroprijatija-lar-i
 game-PL-ACC amuse-CAUS-PTCP.PRS event.PL.R-PL-ACC
oŋor-ol-lor.
 make-PRS-3PL
 'Gathering both children and parents together, they arrange games and amusement events.'
- (9) Хатанга ускуолатын бүтэрбит кииһилэр бэйэлэрин учиталларын үтүө
 ханааннан өйдүүлэр.
Khatanga uskuōla-tin büter-bit kihi-ler
 Khatanga school-POSS.3SG.ACC finish-PTCP.PST human-PL
beje-lerin učital-larin ütūō hana:-nnan
 self-POSS.3PL.GEN teacher-POSS.3PL.ACC good thought-INS
öjd-ü:l-ler.
 remember-PRS-3PL
 'The people, who graduated from the school of Khatanga, keep their teachers in good memory.'

- (10) Долганнар оговоро да ньуучча тылын үчүгэйдик билиэктэрин диэн, элэ ханаатынан ити ускуолага үлэлээбитэ Любовь Александровна Вохмянина.

Dolgan-nar ogo-loro da n'u:čča til-in
 Dolgan-PL child-POSS.3PL EMPH Russian language-POSS.3SG.ACC
üčügej-dik bil-îek-terin diê-n, ele
 good-ADVZ know-PTCP.FUT-POSS.3PL.ACC say-CVB.SEQ last
hana:ti-nan iti usküôla-ga ülele:bit-e L.A.V.
 soul-POSS.3SG-INS this school-DAT/LOC work-PST-3SG L.A.V.
 'For that also the Dolgan children know the Russian language well, Lyubov Aleksandrovna Vokhmyanina (L.A.V.) was working in this school with heart and soul.'

- (11) Гини аатын аны даа чубу-чубу истэбит.

Gini a:t-in ani da: čubu-čubu ist-e-bit.
 3SG.PRO name-POSS.3SG.ACC now EMPH often-often hear-PRS-1PL
 'We hear her name even now very often.'

- (12) Ити дьактар үөрэппит оговоро Таймыр ологугар үтүөнү оңороллор.

Iti d'aktar üörep-pit ogo-lor-o Tajmir
 this woman teach-PTCP.PST child-PL-POSS.3PL Taimyr
olog-u-gar ütöô-nü oŋor-ol-lor.
 life-POSS.3SG-DAT/LOC good-ACC make-PRS-3PL
 'The children, who were taught by this woman, are doing well for life on Taimyr.'

References

- Adger, David 2003. *Core syntax. A minimalist approach*. Oxford: Oxford University Press.
- Afanas'ev, Pëtr S. & Voronkin, Michail S. & Alekseev, Michail P. 1976. *Dialektologičeskij slovar' jakutskogo jazyka*. [Dialectological dictionary of the Yakut language]. Moscow: Nauka.
- Aikhenvald, Alexandra Y. 2006. *Evidentiality*. Reprint. Oxford: Oxford University Press.
- Aksënova, Evdokija E. & Bel'tjukova, Natalja P. & Koševerova, Tamara M. 1992. *Slovar' dolgansko-russkij i rusko-dolganskij*. [Dolgan-Russian and Russian-Dolgan dictionary]. Saint Petersburg: Prosveščenie.
- Ameka, Felix 1992. Interjections: The universal yet neglected part of speech. *Journal of Pragmatics* 18, 101–118.
- Amelina, Maria K. 2019. “Bolšoj perechod na neneckij”: Rekonstrukcija sociolingvističeskoj situacii v tuchardskoj tundre (Tajmyrskij Dolgano-Neneckij Rayon) po dannym jazykovych biografij. [“The big transition to Nenets”: Reconstruction of the sociolinguistic situation in the Tukhard tundra (Taimyr Dolgan-Nenets District) according to the data of language biographies]. *Tomsk Journal of Linguistics and Anthropology* 1(23), 29–43.
- Anderson, Gregory 1998. Historical aspects of Yakut (Saxa) phonology. *Turkic Languages* 2, 3–31.
- Anikin, Aleksandr E. 1997. *Etimologičeskij slovar' russkich dialektov Sibiri: zaimstvovanija iz uralskich, altajskich i paleoaziatskich jazykov*. [Etymological dictionary of the Russian dialects of Siberia: Borrowings from the Uralic, Altaic and Paleo-Asiatic languages]. Novosibirsk: Nauka.
- Apresjan, Jurij D. 1992. Lexicographic portraits and lexicographic types. In: Guiraud-Weber, Marguerite & Zaremba, Charles (eds.). *Linguistique et Slavistique. Mélanges offerts à Paul Garde*. Tome 1. (Travaux publiés par l'institut d'Études Slaves 36), 361–376. Paris, Aix-en-Provence: Université de Provence.
- Arhipov, Alexandre 2009. Comitative as a cross-linguistically valid category. In: Epps, Patience & Arhipov, Alexandre (eds.). *New challenges in typology: transcending the borders and refining the distinctions*. (Trends in linguistics. Studies and monographs 217), 223–246. Berlin [i.a.]: Mouton de Gruyter.
- Arhipov, Alexandre 2020. *INEL corpora general transcription and annotation principles*. (Working Papers in Corpus Linguistics and Digital Technologies: Analyses and Methodology 5). Szeged & Hamburg: Department of Finno-Ugric Studies of the University of Szeged & Hamburger Zentrum für Sprachkorpora der Universität Hamburg. <https://doi.org/10.14232/wpcl.2020.5>
- Artem'ev, Nikolaj M. 1999a. O padežach prjamoogo ob"jekta v jakutskom i dolganskom jazykach. [On direct object cases in the Yakut and Dolgan languages]. In: Fujishiro,

- Setsu & Shogaito, Masahiro (eds.). *Issues in Turkic languages. Description and language contact*. (Contribution to the Studies of Eurasian Languages Series 1), 65–73. Kyoto: Department of Linguistics of Kyoto University.
- Artem'ev, Nikolaj M. 1999b. Častnyj padež v dolganskom jazyke v sravnenii s jakutskim i evenkijskim jazykami. [The partitive case in the Dolgan language compared to the Yakut and Ewenki languages]. In: Fujishiro, Setsu & Shogaito, Masahiro (eds.). *Issues in Turkic languages. Description and language contact*. (Contribution to the Studies of Eurasian Languages Series 1), 105–115. Kyoto: Department of Linguistics of Kyoto University.
- Artem'ev, Nikolaj M. 2013a. *Dolganskij jazyk. 10–11 klassy. Učebnoe posobie dlja obščeo-brazovatel'nych učreždenij. Čast' 1. Vvedenie, obščie voprosy, fonetika i grafika, leksika*. [The Dolgan language. 10th to 11th grade. Textbook for secondary schools. Part 1. Introduction, general questions, phonetics and graphics, lexicon]. Saint Petersburg: Almaz-Graf.
- Artem'ev, Nikolaj M. 2013b. *Dolganskij jazyk. 10–11 klassy. Učebnoe posobie dlja obščeo-brazovatel'nych učreždenij. Čast' 2. Morfologija*. [The Dolgan language. 10th to 11th grade. Textbook for secondary schools. Part 2. Morphology]. Saint Petersburg: Almaz-Graf.
- Artem'ev, Nikolaj M. & Nazmutdinova, Tatjana S. & Spiridonova, Žanna P. 2013. *Dolganskij jazyk. 10–11 klassy. Učebnoe posobie dlja obščeo-brazovatel'nych učreždenij. Čast' 3. Sintaksis*. [The Dolgan language. 10th to 11th grade. Textbook for secondary schools. Part 3. Syntax]. Saint Petersburg: Almaz-Graf.
- Austin, John 1979 [1962]. *Zur Theorie der Sprechakte*. [How to do things with words]. Translated by Eike von Savigny. Stuttgart: Reclam.
- Barbolina, Anna A. 2014. *Toponimika Tajmyra*. [Toponymy of Taimyr]. Dudinka: Tajmyrskij Dom Narodnogo Tvorčestva.
- Barbolina, Anna A. & Kudrjakova, Nina S. & Žarkova, Natalja N. & Fujishiro, Setsu 2019. *Dolgansko-russkij slovar: 10–11 klassy. Učebnoe posobie dlja obščeo-brazovatel'nych organizacij*. [Dolgan-Russian dictionary: 10th to 11th grade. Textbook for secondary schools]. Saint Petersburg: Almaz-Graf.
- Bel'tjukova, Natalja P. & Koševerova, Tamara M. 1987. Materialy po dolganskomu jazyku voprosnika "dialektologičeskogo atlasa tjurkskich jazykov Sibiri". [The materials on the Dolgan language of the "dialectological atlas of the Turkic languages of Siberia"]. In: Ubrjatova, Elizaveta I. (ed.). *Dialektnaja leksika tjurkskich jazykov*. [Dialectal lexis of the Turkic languages], 76–83. Novosibirsk: Institut istorii, filologii i filosofii.
- Benzing, Johannes 1955a. *Die tungusischen Sprachen: Versuch einer vergleichenden Grammatik*. [The Tungusic languages: Attempt to a comparative grammar]. (Abhandlungen der geistes- und sozialwissenschaftlichen Klasse 1955(11)). Wiesbaden: Akademie der Wissenschaften und der Literatur in Mainz.
- Benzing, Johannes 1955b. *Lamutische Grammatik. Mit Bibliographie, Sprachproben und*

- Glossar*. [Lamut grammar. With a bibliography, speech samples and a glossary]. (Akademie der Wissenschaften und der Literatur. Veröffentlichungen der orientalischen Kommission 6). Wiesbaden: Steiner.
- Berger, Tilman 2015. Das Russische. [Russian]. In: Rehder, Peter (ed.). *Einführung in die slavischen Sprachen (mit einer Einführung in die Balkanphilologie)*. [Introduction to the Slavic languages (with an introduction to Balkan philology)]. 7th edition, 49–93. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Berlin, Brent & Kay, Paul 1969. *Basic color terms: their universality and evolution*. Berkeley & Los Angeles: University of California Press.
- Bhat, Darbhe N.S. 2004. *Pronouns*. (Cambridge textbooks in linguistics). Cambridge: Cambridge University Press.
- Bielfeldt, Hans Holm 1961. *Altslawische Grammatik. Einführung in die slawischen Sprachen*. [Old Slavonic grammar. Introduction to the Slavic languages]. Halle [Saale]: VEB Max Niemeyer.
- Boldyrev, Boris V. 1994. *Russko-evenkijskij slovar'*. [Russian-Ewenki dictionary]. Novosibirsk: Nauka.
- Boldyrev, Boris V. 2000a. *Evenkijsko-russkij slovar'*. [Ewenki-Russian dictionary]. Vol. 1 A–P. Novosibirsk: Izdatel'stvo SO RAN.
- Boldyrev, Boris V. 2000b. *Evenkijsko-russkij slovar'*. [Ewenki-Russian dictionary]. Vol. 2 R–Ja. Novosibirsk: Izdatel'stvo SO RAN.
- Bolina-Ukačër, Tatjana V. 2011. *Chantajskie evenki*. [The Khantay Ewenks]. Krasnoyarsk: Tajmyrskij Dom Narodnogo Tvorčestva.
- Boogaart, Ronny 2004. Aspect and aktionsart. In: Booij, Geert E. & Lehmann, Christian & Mugdan, Joachim & Skopeteas, Stavros (eds.). *Morphologie: Ein internationales Handbuch zur Flexion und Wortbildung*. [Morphology: an international handbook of inflection and word formation]. (Handbücher zur Sprach- und Kommunikationswissenschaft 17(2)), 1165–1180. Berlin [i.a.]: De Gruyter.
- Bossong, Georg 1985. *Empirische Universalienforschung. Differentielle Objektmarkierung in den neuiranischen Sprachen*. [Empirical research on universals. Differential object marking in New Iranian languages]. Tübingen: Narr.
- Brykina, Maria & Orlova, Svetlana & Wagner-Nagy, Beáta 2020. *INEL Selkup Corpus*. Version 1.0. Publication date 2020-06-30. <http://hdl.handle.net/11022/0000-0007-E1D5-A>. In: Wagner-Nagy, Beáta & Arkhipov, Alexandre & Ferger, Anne & Jettka, Daniel & Lehmberg, Timm (eds.). *The INEL corpora of indigenous Northern Eurasian languages*.
- Buder, Anja 1989. *Aspekto-temporale Kategorien im Jakutischen*. [Aspecto-temporal categories in Yakut]. (Frankfurter Turkologische Arbeitsmittel 5). Wiesbaden: Harrassowitz.
- Bulatova, Nadezhda & Grenoble, Lenore 1999. *Evenki*. (Languages of the World. Materials 141). Munich: LINCOM Europe.

- Bybee, Joan & Perkins, Revere & Pagliuca, Williams 1994. *The evolution of grammar. Tense, aspect, and modality in the languages of the world*. Chicago & London: The University of Chicago Press.
- Castrén 1855 = Schiefner, Anton (ed.) 1855. *M. Alexander Castrén's Wörterverzeichnisse aus den samojedischen Sprachen*. [M. Alexander Castrén's vocabulary from the Samoyedic languages]. Saint Petersburg: Kaiserliche Akademie der Wissenschaften.
- Chafe, Wallace 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view. In: Li, Charles N. (ed.). *Subject and topic*, 27–55. New York: Academic Press.
- Chelimsij, Evgenij A. 2000. Nganasanskie zaimstvovanija v dolganskom jazyke: K vychodu v svet dolganskogo slovar'ja M. Stachowskogo. [Nganasan loans in the Dolgan language. On the occasion of the publication of M. Stachowski's Dolgan dictionary]. In: Chelimsij, Evgenij A. (ed.). *Komparativistika, uralistika: lekcii i stat'i*. [Comparativistics, Uralistics: Lectures and papers], 320–322. Moscow: Nauka.
- Comrie, Bernard 1976. *Aspect*. (Cambridge textbooks in linguistics). Cambridge: Cambridge University Press.
- Comrie, Bernard 1989. *Language universals and linguistic typology: syntax and morphology*. Second edition. Oxford: Blackwell.
- Corbett, Greville 2000. *Number*. (Cambridge textbooks in linguistics). Cambridge: Cambridge University Press.
- Creissels, Denis 2014. *Existential predication in typological perspective*. Working paper. Available online: <http://www.deniscreissels.fr/public/Creissels-Exist.Pred.pdf>. Last access: 01.03.2022.
- Däbritz, Chris Lasse 2018a. On *kim-*, *kinne-* and *kaña-*. Three placeholder items in Dolgan. *Turkic Languages* 22(2), 286–302.
- Däbritz, Chris Lasse 2018b. Predicative possession in Dolgan. *Tomsk Journal of Linguistics and Anthropology* 2(20), 29–38.
- Däbritz, Chris Lasse 2019a. First person imperative in Dolgan—Clusivity or number distinction? *Finnisch-Ugrische Mitteilungen* 43, 1–12.
- Däbritz, Chris Lasse 2019b. On ambiguous verb sequences in Dolgan. In: Csató, Éva Á. & Johanson, Lars & Karakoç, Birsal (eds.). *Ambiguous verb sequences in Transeurasian languages and beyond*. (Turcologica 120), 117–134. Wiesbaden: Harrassowitz.
- Däbritz, Chris Lasse 2020a. *User's guide to INEL Dolgan Corpus*. (Working Papers in Corpus Linguistics and Digital Technologies: Analyses and Methodology 4). Szeged & Hamburg: Department of Finno-Ugric Studies of the University of Szeged & Hamburger Zentrum für Sprachkorpora der Universität Hamburg. <https://doi.org/10.14232/wpcl.2020.4>
- Däbritz, Chris Lasse 2020b. The INEL Dolgan Corpus. *Turkic Languages* 24, 142–151.
- Däbritz, Chris Lasse 2020c. The INEL Dolgan Corpus: Insights into an endangered language of Northern Eurasia. *Finno-Ugric Languages and Linguistics* 9, 67–77.
- Däbritz, Chris Lasse 2020d. Focus position in SOV ~ SVO varying languages—evidence

- from Enets, Nganasan and Dolgan. In: Klumpp, Gerson & Gusev, Valentin (eds.). *Special issue: Current topics in Samoyedology*. (Eesti ja soome-ugri keeleteaduse ajakiri 12(2)), 99–118.
- Däbritz, Chris Lasse 2021a. *Topik, Fokus und Informationsstatus: Modellierung am Material nordwestsibirischer Sprachen*. [Topic, focus, and information status: Modelling on the base of material from North-Western Siberian languages]. (Language, Context and Cognition 17). Berlin & Boston: De Gruyter.
- Däbritz, Chris Lasse 2021b. Typology of number systems in languages of Western and Central Siberia. *Finnisch-Ugrische Forschungen* 66, 85–138. <https://doi.org/10.33339/fuf.97288>
- Däbritz, Chris Lasse & Kudryakova, Nina & Stapert, Eugénie 2019. *INEL Dolgan Corpus*. Version 1.0. Publication date 2019-08-31. <https://hdl.handle.net/11022/0000-0007-CAE7-1>. In: Wagner-Nagy, Beáta & Arkhipov, Alexandre & Ferger, Anne & Jettka, Daniel & Lehmborg, Timm (eds.). The INEL corpora of indigenous Northern Eurasian languages.
- Däbritz, Chris Lasse & Gusev, Valentin 2021. *INEL Evenki Corpus*. Version 1.0. Publication date 2021-12-31. Archived at Universität Hamburg. <https://hdl.handle.net/11022/0000-0007-F43C-3>. In: The INEL corpora of indigenous Northern Eurasian languages. <https://hdl.handle.net/11022/0000-0007-F45A-1>
- Davidson, Donald 1967. The logical form of action sentences. In: Rescher, Nicholas (ed.). *The logic of decision and action*, 81–95. Pittsburgh: University of Pittsburgh Press.
- Davidson, Donald 1980. *Essays on actions and events*. Oxford: Clarendon Press.
- Dik, Simon C. 1978. *Functional grammar*. Amsterdam: North-Holland Publishing Company.
- Dobrushina, Nina & Goussev, Valentin 2005. Inclusive imperative. In: Filimonova, Elena (ed.). *Clusivity. Typology and case-studies of the inclusive-exclusive distinction*. (Typological Studies in Languages 63), 189–221. Amsterdam & Philadelphia: John Benjamins.
- Dolgich, Boris O. 1963. Proischoždenie dolgan. [The origin of the Dolgans]. *Sibirskij Etnografičeskij Sbornik* 5, 92–141.
- Dowty, David 1991. Semantic proto-roles and argument selection. *Language* 67(3), 547–619.
- É. Kiss, Katalin 1998. Identificational focus versus information focus. *Language* 74(2), 245–273.
- Efremov, Prokopij E. (ed.) 2000. *Fol'klor Dolgan*. [Dolgan folklore]. (Pamjatniki fol'klora narodov Sibiri i Dal'nego Vostoka 19). Novosibirsk: Izdatel'stvo Instituta Archeologii i Etnografii Sibirskogo Otdelenija Rossijskoj Akademii Nauk.
- ESTYa VI 2000 = Levitskaja, Lija E. & Dybo, Anna V. & Rassadin, Valentin I. 2000. *Etimologičeskij slovar' tjurkskich jazykov. Tom VI. Obščetjurkskie i mežtjurkskie osnovy na*

- bukvu* 'K'. [Etymological dictionary of the Turkic languages. Volume 6. Common Turkic and Middle Turkic roots with the letter 'Q']. Moscow: Izdatel'stvo Indrik.
- Fălăuş, Anamaria 2020. Negation and alternatives. Interaction with focus constituents. In: Déprez, Viviane & Espinal, Maria Teresa (eds.). *The Oxford handbook of negation*, 333–348. Oxford: Oxford University Press.
- Fasmer, Max 1987a [1958]. *Etimologičeskij slovar' russkogo jazyka*. Tom 3. [Etymological dictionary of the Russian language. Volume 3.] Translated from German by O.N. Trubačeva. Moscow: Progress.
- Fasmer, Max 1987b [1958]. *Etimologičeskij slovar' russkogo jazyka*. Tom 4. [Etymological dictionary of the Russian language. Volume 4.] Translated from German by O.N. Trubačeva. Moscow: Progress.
- Forsyth, James 1992. *A history of the peoples of Siberia: Russia's North Asian colony 1581–1990*. Cambridge: Cambridge University Press.
- Fox, Barbara 2010. Introduction. In: Amiridze, Nino & Davis, Boyd H. & MacLagan, Margaret (eds.). *Fillers, pauses and placeholders*. (Typological Studies in Languages 93), 1–9. Amsterdam & Philadelphia: John Benjamins.
- Franck, Julie & Lassi, Glenda & Frauenfelder, Ulrich H. & Rizzi, Luigi 2006. Agreement and movement: a syntactic analysis of attraction. *Cognition* 101, 173–216.
- Freeze, Ray 1992. Existentials and other locatives. *Language* 68(3), 553–595.
- Georg, Stefan 2007. *A descriptive grammar of Ket (Yenisei-Ostyak)*. Folkestone: Global Oriental.
- Giannakidou, Anastasia 2000. 'Negative ... concord?'. *Natural Language and Linguistic Theory* 18, 457–523.
- Götze, Michael & Weskott, Thomas & Endriss, Cornelia & Fiedler, Ines & Hinterwimmer, Stefan & Petrova, Svetlana & Schwarz, Anne & Skopeteas, Stavros & Stoel, Ruben 2007. Information structure. In: Dipper, Stephanie & Götze, Michael & Skopeteas, Stavros (eds.). *Information structure in cross-linguistic corpora. Interdisciplinary studies on information structure* 07, 147–187. Available online at: https://publi.shup.uni-potsdam.de/opus4-ubp/frontdoor/deliver/index/docId/2036/file/Kapitel_6_07.pdf. Last access: 01.03.2022.
- Grimshaw, Jane 1990. *Argument structure*. (Linguistic Inquiry Monographs 18). Cambridge [Mass.]: MIT Press.
- Gusev, Valentin 2013. *Tipologija imperativa*. [Typology of the imperative]. Moscow: Jazyki slav'janskoj kul'tury.
- Haider, Hubert 2018. *Phrase-structure based typology*. Submitted manuscript. Available online at: <https://doi.org/10.13140/RG.2.2.34341.76008>. Last access: 01.03.2022.
- Haider, Hubert 2020. VO/OV-base ordering. In: Page, Richard & Putnam, Michael (eds.). *The Cambridge handbook of Germanic linguistics*, 339–364. Cambridge: Cambridge University Press.
- Haig, Geoffrey & Schnell, Stefan 2014. *Annotations using GRAID (Grammatical relations*

- and animacy in discourse*). *Introduction and guidelines for annotators*. Version 7.0. Available online at: <https://opus4.kobv.de/opus4-bamberg/frontdoor/index/index/docId/26235>. Last access: 01.03.2022.
- Haspelmath, Martin 2016. The serial verb construction: comparative concept and cross-linguistic generalizations. *Language & Linguistics* 17(3), 291–319.
- Hasselgård, Hilde 2010. *Adjunct adverbials in English*. (Studies in English language). Cambridge: Cambridge University Press.
- Hauenschild, Ingeborg 2008. *Lexikon jakutischer Tierbezeichnungen*. [Lexicon of Yakut animal terms]. (Turcologica 77). Wiesbaden: Harrassowitz.
- Hayashi, Makoto & Yoon, Kyung-eun 2010. A cross-linguistic exploration of demonstratives in interaction: With particular reference to the context of word-formation trouble. In: Amiridze, Nino & Davis, Boyd H. & MacLagan, Margaret (eds.). *Fillers, pauses and placeholders*. (Typological Studies in Languages 93), 33–66. Amsterdam & Philadelphia: John Benjamins.
- Heim, Irene 1982. *The semantics of definite and indefinite noun phrases*. PhD Thesis. Amherst [Mass.]: University of Massachusetts.
- Heine, Bernd 1997. *Possession. Cognitive sources, forces, and grammaticalization*. (Cambridge studies in linguistics 83). Cambridge: Cambridge University Press.
- Helimski, Eugene & Janhunen, Juha 1990. Once more on the ethnonym “Tungus”. In: Pusztay, János (ed.). *Gedenkschrift für Irén N. Sebestyen (1890–1978)*. [Memorial volume for Irén N. Sebestyen (1890–1978)]. (Specimina Sibirica 3), 67–72. Szombathely: Janus Pannonius University.
- Hengeveld, Kees 2004. Illocution, mood, and modality. In: Booij, Geert E. & Lehmann, Christian & Mugdan, Joachim & Skopeteas, Stavros (eds.). *Morphologie: Ein internationales Handbuch zur Flexion und Wortbildung*. [Morphology: an international handbook of inflection and word formation]. (Handbücher zur Sprach- und Kommunikationswissenschaft 17(2)), 1190–1201. Berlin [i.a.]: De Gruyter.
- Iggesen, Oliver A. 2013. Number of cases. In: Dryer, Matthew S. & Haspelmath, Martin (eds.). *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at: <http://wals.info/chapter/49>. Last access: 01.03.2022.
- Itturioz-Leza, José Luis & Skopeteas, Stavros 2004. *Numerus*. [Number]. In Booij, Geert E. & Lehmann, Christian & Mugdan, Joachim & Skopeteas, Stavros (eds.). *Morphologie: Ein internationales Handbuch zur Flexion und Wortbildung*. [Morphology: an international handbook of inflection and word formation]. (Handbücher zur Sprach- und Kommunikationswissenschaft 17(2)), 1053–1066. Berlin [i.a.]: De Gruyter.
- Janhunen, Juha 1977a. Samoyed-Altaic contacts. Present state of research. In: Janhunen, Juha (ed.). *Altaica: proceedings of the 19th annual meeting of the Permanent International Altaistic Conference*. (Suomalais-Ugrilaisen Seuran Toimituksia 158), 123–129. Helsinki: Suomalais-Ugrilainen Seura.

- Janhunen, Juha 1977b. *Samojedischer Wortschatz. Gemeinsamojedische Etymologien*. [Samoyedic lexicon. Common Samoyedic etymologies]. (Castrenianumin toimitteita 17). Helsinki: Suomalais-Ugrilainen Seura.
- Janhunen, Juha 1988. Samoyedological news. Review of recent publications. *Finnisch-Ugrische Forschungen* 48(2–3), 316–329.
- Janhunen, Juha 2012. *Mongolian*. (London Oriental and African Language Library 19). Amsterdam & Philadelphia: John Benjamins.
- Jark, Florian 2018. *Desiderative Konstruktionen im Enzischen, Nganasanischen und Dolganischen*. [Desiderative constructions in Enets, Nganasan and Dolgan]. Unpublished MA thesis. Hamburg: University of Hamburg.
- Jastremskij, Sergej V. 1900. *Grammatika jakutskago jazyka*. [Grammar of the Yakut language]. Irkutsk: Izdanie knižnago magazina P.I. Makušina.
- Johanson, Lars 1971. *Aspekt im Türkischen. Vorstudien zu einer Beschreibung des türkischen Aspektsystems*. [Aspect in Turkic. Preliminary studies for a description of the Turkish aspect system]. Lund: Berlingska Boktryckeriet.
- Johanson, Lars 1991. Zur Syntax der alttürkischen Kausativa. [On the syntax of Old Turkic causatives]. In: Hazai, György (ed.). *Linguistische Beiträge zur Gesamtsturkologie*. [Linguistic contributions to general turcology]. (Bibliotheca Orientalis Hungarica 37), 198–209. Budapest: Akadémiai Kiadó. [Reprint of: Johanson, Lars 1974. Zur Syntax der alttürkischen Kausativa. [On the syntax of Old Turkic causatives]. *Zeitschrift der Deutschen Morgenländischen Gesellschaft*. Suppl. 11, 529–540.]
- Johanson, Lars 1998a. The structure of Turkic. In: Johanson, Lars & Csató, Éva Á. (eds.). *The Turkic languages*, 30–66. London [i.a.]: Routledge.
- Johanson, Lars 1998b. The history of Turkic. In: Johanson, Lars & Csató, Éva Á. (eds.). *The Turkic languages*, 81–125. London [i.a.]: Routledge.
- Johanson, Lars 2000. Viewpoint operators in European languages. In: Dahl, Östen (ed.). *Tense and aspect in the languages of Europe*, 27–187. Berlin & New York: Mouton de Gruyter.
- Johanson, Lars 2018. Turkic indirectivity. In: Aikhenvald, Alexandra Y. (ed.). *The Oxford handbook of evidentiality*, 510–524. Oxford: Oxford University Press.
- Johanson, Lars 2021. *Turkic*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781139016704>
- Johanson, Lars & Csató, Éva Á. 1998. *The Turkic languages*. London [i.a.]: Routledge.
- Junghanns, Uwe 2002. *Informationsstrukturierung in slavischen Sprachen: Zur Rekonstruktion in einem syntax-zentrierten Modell der Grammatik*. [Information structuring in Slavic languages: On the reconstruction within a syntax-centric model of grammar]. Habilitation thesis. Leipzig: University of Leipzig.
- Junghanns, Uwe & Zybatow, Gerhild 2009. Grammatik und Informationsstruktur. [Grammar and information structure]. In: Kempgen, Sebastian & Kosta, Peter & Berger, Tilman & Gutschmidt, Karl (eds.). *Die slavischen Sprachen*. [The Slavic lan-

- guages]. (Handbücher zur Sprach- und Kommunikationswissenschaft 32(1)), 684–707. Berlin: De Gruyter.
- Kałużyński, Stanisław 1961. *Mongolische Elemente in der jakutischen Sprache*. [Mongolic elements in the Yakut language]. (Prace orientalistyczne X). Warsaw: Państwowe Wydawnictwo Naukowe.
- Karakoç, Birsal 2019. Predicative possession in Oghuz and Kipchak Turkic languages. In: Johanson, Lars & Mazitelli, Lidia Federica & Nevskaya, Irina (eds.). *Possession in languages of Europe and North and Central Asia*. (Studies in Language Companion Series 206), 125–148. Amsterdam & Philadelphia: John Benjamins.
- Károlyi, László 2009. Dominancy in Yakut: a historical approach. *International Journal of Central Asian Studies* 13, 343–353.
- Kay, Paul & Maffi, Luisa 2013. Number of non-derived basic colour categories. In: Dryer, Matthew S. & Haspelmath, Martin (eds.). *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at: <http://wals.info/chapter/132>. Last access: 01.03.2022.
- Khanina, Olesya & Koryakov, Yuri & Shluinsky, Andrey 2018. Enets in space and time: a case study in linguistic geography. *Finnisch-Ugrische Mitteilungen* 42, 109–135.
- Kim, Alan 1988. Preverbal focusing and type XXIII languages. In: Hammond, Michael & Moravcsik, Edith & Wirth, Jessica (eds.). *Studies in syntactic typology*. (Typological Studies in Language 17), 147–169. Amsterdam & Philadelphia: John Benjamins.
- Korkina, Evdokija I. 1970. *Naklonenija glagola v jakutskom jazyke*. [Moods of the verb in the Yakut language]. Moscow: Nauka.
- Ladd, D. Robert 2001. Intonation. In: Haspelmath, Martin & König, Ekkehard & Oesterreicher, Wulf & Raible, Wolfgang (eds.). *Language typology and language universals*. (Handbücher zur Sprach- und Kommunikationswissenschaft 20(2)), 1380–1390. Berlin & Boston: De Gruyter.
- Ladefoged, Peter & Maddieson, Ian 1996. *The sounds of the world's languages*. Oxford: Blackwell.
- Lambrecht, Knud 1994. *Information structure and sentence form: topic, focus, and the mental representation of discourse referents*. (Cambridge studies in linguistics 71). Cambridge: Cambridge University Press.
- Larson, Richard 1988. On the double object construction. *Linguistic Inquiry* 19(3), 335–391.
- Lavoie, Lisa 2001. *Consonant strength: phonological patterns and phonetic manifestations*. New York: Garland.
- Lehtisalo, Toivo 1956. *Juraksamojedisches Wörterbuch*. [Yurak-Samoyed dictionary]. (Lexica Societatis Fenno-Ugricae XIII). Helsinki: Suomalais-Ugrilainen Seura.
- Leipzig Glossing Rules 2015 = Max Planck Institute for Evolutionary Anthropology. Department of Linguistics (ed.). *Leipzig Glossing Rules. Conventions for interlinear morpheme-by-morpheme glosses*. Leipzig: Max Planck Institute for Evolution-

- ary Anthropology. Available online at: <https://www.eva.mpg.de/lingua/resources/glossing-rules.php>. Last access: 01.03.2022.
- Li, Yong-Song 2009. The names of parts of human body in Dolgan. *Central Asiatic Journal* 53(2), 228–261.
- Li, Yong-Song 2011. *A study of Dolgan*. (Altaic Languages Series 5). Seoul: Seoul National University Press.
- Longacre, Robert E. 1985. Sentences as combinations of clauses. In: Shopen, Tim (ed.). *Language typology and syntactic description. Volume 11: Complex constructions*, 235–286. Cambridge: Cambridge University Press.
- Lyons, John 1977. *Semantics*. Volume 2. Cambridge: Cambridge University Press.
- Lyons, Christopher 1999. *Definiteness*. (Cambridge textbooks in linguistics). Cambridge: Cambridge University Press.
- Maddieson, Ian 2013a. Consonant inventories. In: Dryer, Matthew S. & Haspelmath, Martin (eds.). *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at: <https://wals.info/chapter/1>. Last access: 01.03.2022.
- Maddieson, Ian 2013b. Syllable structure. In: Dryer, Matthew S. & Haspelmath, Martin (eds.). *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at: <http://wals.info/chapter/12>. Last access: 01.03.2022.
- Maienborn, Claudia 2012. Event semantics. In: Maienborn, Claudia & Von Stechow, Klaus & Portner, Paul (eds.). *Semantics: an international handbook of natural language meaning*. (Handbücher zur Sprach- und Kommunikationswissenschaft 33(3)), 802–829. Berlin: De Gruyter.
- Malceva, Vera & Sokur, Elena 2021. *Spoken corpus of the dialects of Khakas*. Moscow: Institute of Linguistics & Linguistic Convergence Laboratory, NRU HSE. Available online at http://lingconlab.ru/spoken_khakas/. Last access: 01.03.2022.
- Malchukov, Andrey & Haspelmath, Martin & Comrie, Bernard 2010. Ditransitive constructions: A typological overview. In: Malchukov, Andrey & Haspelmath, Martin & Comrie, Bernard (eds.). *Studies in ditransitive constructions: a comparative handbook*, 1–64. Berlin: Mouton de Gruyter.
- Malchukov, Andrey & Ogawa, Akio 2011. Towards a typology of impersonal constructions: A semantic map approach. In: Malchukov, Andrey & Siewierska, Anna (eds.). *Impersonal constructions. A cross-linguistic perspective*, 19–56. Amsterdam & Philadelphia: John Benjamins.
- Menges, Karl H. 1943. The function and origin of the Tungus tense in -ra and some related questions of Tungus grammar. *Language* 19(3), 237–251.
- Menges, Karl H. 1995. *The Turkic languages and people. An introduction to Turkic studies*. Second revised edition. (Veröffentlichungen der Societas Uralo-Altaica 42). Wiesbaden: Harrassowitz.

- Miestamo, Matti 2005. *Standard negation. The negation of declarative verbal main clauses in a typological perspective*. (Empirical approaches to language typology 31). Berlin & New York: Mouton de Gruyter.
- Milsark, Gary 1977. Towards an explanation of certain peculiarities of the existential construction in English. *Linguistic Analysis* 3, 1–29.
- Miščenkova, Karina O. 2019. Refleksy praevenkijskogo *s v govorach evenkijskogo jazyka v konce XVII v. i pervoj polovine XVIII v. [The reflexes of Proto-Ewenki *s in the dialects of the Ewenki language at the end of the 17th century and in the first half of the 18th century]. *Uralo-altajskie issledovanija* [Ural-Altaic Studies] 3(34), 72–83.
- Molnár, Valéria 1991. *Das TOPIK im Deutschen und Ungarischen*. [The TOPIC in German and Hungarian]. (Lunder germanistische Forschungen 58). Stockholm: Almqvist & Wiksell International.
- Myreeva, Anna M. 2004. *Evenkijsko-russkij slovar'*. [Ewenki-Russian dictionary]. Novosibirsk: Nauka.
- Nevskaya, Irina 2005. Inclusive and exclusive in Turkic languages. In: Filimonova, Elena (ed.), *Clusivity. Typology and case-studies of the inclusive-exclusiv distinction*. (Typological Studies in Languages 63), 341–358. Amsterdam & Philadelphia: John Benjamins.
- Nevskaya, Irina & Amal, Lina 2020. The nominal group, possessive agreement, and nominal sentences in the Transeurasian languages. In: Robbeets, Martine & Savelyev, Alexander (eds.), *The Oxford guide to the Transeurasian languages*, 587–603. Oxford: Oxford University Press.
- Nikolaeva, Irina 2006. *A historical dictionary of Yukaghir*. (Trends in Linguistics. Documentation 25). Berlin & New York: Mouton de Gruyter.
- Nikolaeva, Irina 2014. *A grammar of Tundra Nenets*. (Mouton Grammar Library 65). Berlin & Boston: De Gruyter.
- Nissim, Malvina & Dingare, Shipra & Carletta, Jean & Steedmann, Mark 2004. An annotation scheme for information status in dialogue. In: Lino, Maria Teresa et al. (eds.), *Proceedings of the 4th Language Resources and Evaluation Conference (LREC)*, 1023–1026. Paris: ELRA.
- Pakendorf, Brigitte 2007. *Contact in the prehistory of the Sakha (Yakuts): Linguistic and genetic perspectives*. (LOT Publications). Utrecht: Landelijke Onderzoekschool Taalwetenschap (LOT).
- Pakendorf, Brigitte 2008. The shift of [s] to [h] in Sakha (Yakut)—external influence or internal change? *Turkic Languages* 12, 3–21.
- Pakendorf, Brigitte & Novgorodov, Innokentij N. 2009. Loanwords in Sakha (Yakut), a Turkic language of Siberia. In: Haspelmath, Martin & Tadmor, Uri (eds.), *Loanwords in the world's languages. A comparative handbook*, 496–524. Berlin: De Gruyter Mouton.

- Pakendorf, Brigitte & Schalley, Ewa 2007. From possibility to prohibition: A rare grammaticalization pathway. *Linguistic Typology* 11(3), 515–540. <https://doi.org/10.1515/LINGTY.2007.032>
- Payne, Thomas E. 1997. *Describing morphosyntax: a guide for field linguists*. Cambridge: Cambridge University Press.
- Penka, Doris 2020. Negative indefinites and negative concord. In: Gutzmann, Daniel & Matthewson, Lisa & Meier, Cécile & Rullmann, Hotze & Zimmerman, Thomas Ede (eds.). *The Wiley Blackwell companion to semantics*. Vol. 2, 2001–2023. Hoboken: Wiley Blackwell.
- Perlmutter, David M. 1978. Impersonal passives and the unaccusative hypothesis. *Berkeley Linguistics Society* 4, 157–189.
- Plungian, Vladimir A. 2001. The place of evidentiality in the universal grammatical space. *Journal of Pragmatics* 33, 349–357.
- Plungian, Vladimir A. 2010. *Vvedenie v grammatičeskuju semantiku: grammatičeskie značenija i grammatičeskie sistemy jazykov mira*. [Introduction to grammatical semantics: grammatical meanings and grammatical systems of the world's languages]. Moscow: Rossijskij gosudarstvennyj gumanitarnyj universitet.
- Podlesskaya, Vera 2010. Parameters for typological variation of placeholders. In: Amiridze, Nino & Davis, Boyd H. & MacLagan, Margaret (eds.). *Fillers, pauses and placeholders*. (Typological studies in languages 93), 11–32. Amsterdam & Philadelphia: John Benjamins.
- Popov, Aleksej A. 1934. Materialy po rodovomu stroju dolgan. [Materials on the tribal order of the Dolgans]. *Sovetskaja Etnografija* 4, 116–139.
- Popov, Aleksej A. 1935. Olenevodstvo u Dolgan. [Reindeer herding among the Dolgans]. *Sovetskaja Etnografija* 4–5, 184–205.
- Popov, Aleksej A. 1937a. Ochota i rybolovstvo u Dolgan. [Hunting and fishing among the Dolgans]. In: Meščaninov, Ivan I. (ed.). *Pamjati V.G. Bogoraza*. [Commemorations of V.G. Bogoraz], 147–206. Moscow & Leningrad: Akademija Nauk SSSR.
- Popov, Aleksej A. 1937b. Technika u Dolgan. [Technology of the Dolgans]. *Sovetskaja Etnografija* 1, 91–136.
- Popov, Aleksej A. 1946. Semejnaja žizn' u dolgan. [Family life of the Dolgans]. *Sovetskaja Etnografija* 4, 50–74.
- Popov, Aleksej A. 1952. Kočevaja žizn' i tipy žilišč u Dolgan. [Nomad life and types of dwellings of the Dolgans]. *Trudy Instituta etnografija AN SSSR* 18, 142–172.
- Popov, Nikolaj A. 2011. *Po pjati rekam Avama* [Avam bies ürekerin üstün]. [Along the five rivers of Avam]. Dudinka: Tajmyrskij Dom Narodnogo Tvorčestva.
- Räsänen, Matti 1969. *Versuch eines etymologischen Wörterbuchs der Türkischen Sprachen*. [Attempt of an etymological dictionary of the Turkic languages]. (Lexica Societatis Fenno-Ugricae xvii). Helsinki: Suomalais-Ugrilainen Seura.
- Robbeets, Martine 2007. The causative-passive in the Trans-Eurasian languages. *Turkic Languages* 11, 235–278.

- Schönig, Claus 2007. Notizen zum Partizip auf -Galak. [Notes on the participle -Galak]. *Journal of Turkish Studies* 31(2), 225–230.
- Searle, John 1975. A taxonomy of illocutionary acts. *Language, mind, and knowledge* 7, 344–369.
- Sezer, Engin & Wetzels, Leo 1986. Derived opacity in Yakut vowel harmony. *Gramma* 10(2), 201–224.
- Shlonsky, Ur 1991. Quantifiers as functional heads: A study of quantifier float in Hebrew. *Lingua* 84(2–3), 159–180.
- Siegl, Florian 2013a. The sociolinguistics *status quo* on the Taimyr Peninsula. (*Études finno-ugriennes* 45 [en ligne]). <https://doi.org/10.4000/efo.2472>
- Siegl, Florian 2013b. *Materials on Forest Enets, an indigenous language of Northern Siberia*. (Suomalais-Ugrilaisen Seuran Toimituksia 267). Helsinki: Suomalais-Ugrilainen Seura.
- Siegl, Florian 2015. The non-possessive use of PX.2P in Nganasan and Dolgan. A reappraisal. *Finnisch-Ugrische Mitteilungen* 39, 67–100.
- Siegl, Florian 2018. The syntax and semantics of quantification with *barı* and *barıta* ‘all’ in Taimyr Dolgan. *Language Documentation and Description* 15, 1–35.
- Siegl, Florian 2020. Negation in Taimyr Dolgan. *Turkic Languages* 24(2), 233–289.
- Siewierska, Anna 2004. *Person*. (Cambridge textbooks in linguistics). Cambridge: Cambridge University Press.
- Slepcev, Pëtr A. 1972. *Jakutsko-russkij slovar’*. [Yakut-Russian dictionary]. Moscow: Sovetskaja Enciklopedija.
- Sorokina, Irina P. & Bolina, Darja P. 2009. *Eneckij slovar’ s kratkim grammatičeskim očerkom*. [Enets dictionary with a short grammar sketch]. Saint Petersburg: Nauka.
- Sportiche, Dominique 1988. A theory of floating quantifiers and its corollaries for constituent structure. *Linguistic Inquiry* 19(3), 425–449.
- Stachowski, Marek 1990. Der Lautwandel in der Deklination des jakutischen Interrogativpronomens *tuox?* ‘was?’. [The sound change in the declension of the Yakut interrogative pronoun *tuox?* ‘what?’.] *Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace Językoznawcze* 101, 115–120.
- Stachowski, Marek 1993a. *Dolganischer Wortschatz*. [Dolgan vocabulary]. (Zeszyty Naukowe Uniwersytetu Jagiellońskiego. Prace Językoznawcze 114). Cracow: Uniwersytet Jagielloński.
- Stachowski, Marek 1993b. *Geschichte des jakutischen Vokalismus*. [The history of the Yakut vocalism]. (Rozprawy habilitacyjne 264). Cracow: Nakład Uniwersytetu Jagiellońskiego.
- Stachowski, Marek 1993c. Das tungusische Diminutivsuffix *-kân* im Dolganischen. [The Tungusic diminutive suffix *-kân* in Dolgan]. *Türk Dilleri Araştırmaları* 3, 231–238.
- Stachowski, Marek 1994. Der Instrumental im Jakutischen und Dolganischen. [The instrumental in Yakut and Dolgan]. *Journal of Turkology* 2(2), 245–258.

- Stachowski, Marek 1995. Der Komitativ im Jakutischen und Dolganischen. [The comitative in Yakut and Dolgan]. In: Smoczyński, Wojciech (ed.). *Kuryłowicz memorial volume*. Vol. 2. (Analecta indoeuropaea Cracoviensia 2), 553–559. Cracow: Uniwersytet Jagielloński w Krakowie, Wydział Filologiczny.
- Stachowski, Marek 1996. Über das Alter der dolganischen Sprache. [On the age of the Dolgan language]. *Türk Dilleri Araştırmaları* 6, 123–130.
- Stachowski, Marek 1997. *Dolganische Wortbildung*. [Dolgan word formation]. Cracow: Księgarnia Akademicka.
- Stachowski, Marek 1998. *Dolganischer Wortschatz. Supplementband*. [Dolgan vocabulary. Supplement volume]. Cracow: Księgarnia Akademicka.
- Stachowski, Marek 1999. *Konsonantenadaptation im Dolganischen*. [Consonant adaptation in Dolgan]. (Studia turcologica cracoviensia 6). Cracow: Księgarnia Akademicka.
- Stachowski, Marek 2000. Dolganische Monatsnamen. [Dolgan month names]. *Central Asiatic Journal* 44 (2), 293–300.
- Stachowski, Marek 2002. Zaimstvovannyye slova v dolganskom jazyke: Obzor problem. [Loanwords in the Dolgan language: Overview of problems]. *Kyoto University Linguistic Research* 21, 1–24.
- Stachowski, Marek 2010. Considerations on the system and the origins of terms for the cardinal points in the Dolgan language. *Incontri linguistici* 33, 233–243.
- Stachowski, Marek & Menz, Astrid 1998. Yakut. In: Johanson, Lars & Csátó, Éva Á. (eds.). *The Turkic languages*, 417–433. London [i.a.]: Routledge.
- Stapert, Eugénie 2013. *Contact-induced change in Dolgan: an investigation into the role of linguistic data for the reconstruction of a people's (pre-)history*. (LOT Publications). Utrecht: Landelijke Onderzoekschool Taalwetenschap (LOT).
- Stassen, Leon 1984. The comparative compared. *Journal of Semantics* 3, 142–183.
- Stassen, Leon 1997. *Intransitive predication*. Oxford: Clarendon Press.
- Stassen, Leon 2009. *Predicative possession*. (Oxford studies in typology and linguistic theory). Oxford: Oxford University Press.
- Stassen, Leon 2013. Comparative constructions. In: Dryer, Matthew S. & Haspelmath, Martin (eds.). *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/121>. Last access: 01.03.2022.
- Stern, Dieter 2012. *Tajmyr-Pidgin-Russisch: kolonialer Sprachkontakt in Nordsibirien*. [Taimyr Pidgin Russian: colonial language contact in Northern Siberia]. (Studies on language and culture in Central and Eastern Europe 19). München & Berlin: Otto Sagner.
- Stroik, Thomas 1990. Adverbs as V-sisters. *Linguistic Inquiry* 21(4), 654–661.
- Swadesh, Moris 1971. *The origin and diversification of language*. Post mortem edited by Joel Sherzer. Chicago: Aldine.

- Tadmor, Uri 2009. Loanwords in the world's languages: Findings and results. In: Haspelmath, Martin & Tadmor, Uri (eds.), *Loanwords in the world's languages. A comparative handbook*, 55–75. Berlin: De Gruyter.
- Taylor, John 1995. *Linguistic categorization—Prototypes in linguistic theory*. Second edition. Oxford: Clarendon Press.
- Tenišev, Edchjam R. 1988. *Sravnitel'no-istoričeskaja grammatika tjurkskich jazykov. Morfologija*. [Comparative-historical grammar of the Turkic languages. Morphology]. Moscow: Nauka.
- Tenišev, Edchjam R. 2001. *Sravnitel'no-istoričeskaja grammatika tjurkskich jazykov. Leksika*. [Comparative-historical grammar of the Turkic languages. Lexicon]. Second edition. Moscow: Nauka.
- Tesnière, Lucien 1959. *Éléments de syntaxe structurale*. [Elements of structural syntax]. Paris: Klincksieck.
- Tret'jakov, Pëtr I. 1871. *Turuchanskij kraj, ego priroda i žiteli*. [The Turukhansk region, its nature and inhabitants]. (Zapiski Imperatorskogo Rossijskogo Geografičeskogo Obščestva 2). Saint Petersburg.
- Ubrjatova, Elizaveta I. & Korkina, Evdokija I. & Charitonov, Luka N. & Petrov, Nikolaj E. 1982. *Grammatika literaturnogo jakutskogo jazyka*. [Grammar of the literary Yakut language]. Moscow: Nauka.
- Ubrjatova, Elizaveta I. 1985. *Jazyk Norilskich dolgan*. [The language of the Norilsk Dolgans]. Novosibirsk: Nauka.
- Vasilevič, Glafira V. 1958. *Evenkijsko-russkij slovar'. S priloženijami i grammatičeskim očerkom evenkijskogo jazyka*. [Ewenki-Russian dictionary. With appendices and a grammar sketch of the Ewenki language]. Moscow: Gosudarstvennoe izdatel'stvo inostrannykh i nacional'nykh slovarnej.
- VPN 2010 = *Vserossijskaja perepis' naselenija 2010. Tom 4. Nacional'nyj sostav i vladenie jazykami. Čast' 5. Vlenie jazykami naseleniem Rossijskoj Federacii* [All-Russian census 2010. Vol. 4. National composition and command of languages. Part 5. Command of languages by the population of the Russian Federation]. Available online at: http://www.gks.ru/free_doc/new_site/perepis2010/croc/Documents/Vol4/pub-04-05.pdf. Last access: 01.03.2022.
- Wagner-Nagy, Beáta & Szeverényi, Sándor & Gusev, Valentin 2018. *User's Guide to Nganasan Spoken Language Corpus*. (Working Papers in Corpus Linguistics and Digital Technologies: Analyses and Methodology 1). Szeged & Hamburg: Department of Finno-Ugric Studies of the University of Szeged & Hamburger Zentrum für Sprachkorpora der Universität Hamburg. <https://doi.org/10.14232/wpcl.2018.1>
- Wagner-Nagy, Beáta. 2019. *A Grammar of Nganasan*. Leiden: Brill.
- Whitten, Christopher Mark 2016. *A novel approach for elucidating the complex maternal prehistories of Siberian ethnolinguistic groups using complete mitochondrial genomes*. PhD thesis. Leipzig: University of Leipzig. Available online at: <https://nbn-resolving.org/urn:nbn:de:bsz:15-qucosa-215526>. Last access: 01.03.2022.

- Ziker, John 1998. Kinship, exchange, and ethnicity among the Dolgans and Nganasans of northern Siberia. *Research in Economic Anthropology* 19: 191–238.
- Ziker, John 2002. *Peoples of the tundra: northern Siberians in the post-communist transition*. Prospect Heights [Ill.]: Waveland Press.
- Zybatow, Gerhild & Junghanns, Uwe 1998. *Topiks im Russischen*. [Topics in Russian]. (Sprache & Pragmatik 47). Lund: Germanistisches Institut der Universität Lund.

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